

ubr -

AMERICAN BEE JOURNAL

PUBLIC LIBRARY

NOV 6 1944

DETROIT



November

1944



Order Supplies Now

Labor and material shortages may cause serious shortage of bee supplies next spring and summer. We have an ample stock now. Get your supplies ordered now and assembled this winter. Use ROOT equipment.

CONTAINERS

Large Stock on Hand
Wide Range of Selection
Prompt Shipment Assured

LET US SERVE YOU

THE A. I. ROOT CO. OF IOWA
COUNCIL BLUFFS, IOWA

Buy Your Containers From Our Complete Stock

UTILITY GLASS JARS

Made according to government specifications of clear flint glass with white coated metal caps.

10-lb. jars—case of 4	\$.45
5-lb. jars—case of 6	.42
2-lb. jars—case of 12	.42
1-lb. jars—case of 12	.38
1/2-lb. jars—case of 48	1.28

SIXTY POUND CANS

Well seamed and soldered, equipped with 2 1/2" wax board lined caps.

Box of two 60-lb. cans	\$1.00
60-lb. cans in bulk, each	.32
60-lb. cans per carton of 24	7.44

COMB HONEY CONTAINERS

Comb honey shipping cases, window cartons and cellophane bag and flat style wrappers for all size sections. Write for prices.

Label samples and prices mailed on request

We still have a complete line of sections, foundation and wooden beeware.

August Lotz Company
BOYD, WISCONSIN

HONEY CONTAINERS

Glass Jars

We have a good stock of glass jars ready for prompt shipment. Our jars are the "Victory" style round jars packed in substantial cartons equipped with lacquered paper lined caps.

PRICES

Case of 48— 8 oz.	15 lbs.	\$1.30 per case
Case of 24—16 oz.	12 lbs.	.75 per case
Case of 12—32 oz.	9 lbs.	.50 per case
Case of 12—48 oz.	11 lbs.	.55 per case
Case of 6— 5 lb. (no bails)	10 lbs.	.42 per case
Case of 4—10 lb. (no bails)	13 lbs.	.45 per case

60-lb. Cans

Standard square 2 1/4" screw cap cans in stock ready for shipment.

PRICES

Packed in single cartons	\$.45 each
Packed 16 in a carton	5.50 per carton
In bulk (no cartons)	.31 each

QUANTITY CASH WITH ORDER DISCOUNTS

On an order of \$50.00 or more at one time 5%.
On an order of \$100.00 or more at one time 10%.

If you have not signed a 'Purchaser's Certificate' for cans or jars, please write us for same

DADANT & SONS : : : : Hamilton, Illinois

To assure yourself of obtaining the best of supplies, read the ads of American Bee Journal

Honey Containers

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

All our tin containers are standard size. Glass containers are clear, include caps and put up in cartons suitable for reshipping. If your order is for \$50 at the prices shown, deduct 5%; if \$100, deduct 10% in ordering tin and glass container or both together. Style glass supplied will be what we can buy. Styles regulated by WPB conservation orders beyond our control. Prices f.o.b. following points.

Cat. No.	Description	Watertown	Sioux City	Lynchburg	Albany
625	—5 gal. cans, 16 in ctn., wt. 54 lbs.-----	\$5.49	\$5.70	\$5.67	\$5.71
631	—1 lb. jars, 24 in ctn., wt. 11 lbs.-----	.92	1.04	1.00	1.01
632	—2 lb. jars, 12 in ctn., wt. 8 lbs.-----	.60	.69	.65	.67
633	—3 lb. jars, 12 in ctn., wt. 18 lbs.-----	.65	.72	.67	.67
635	—5 lb. round glass pails, 6 in ctn., wt. 11 lbs.	.52	.59	.56*	.57
640	—10 lb. round glass jars, 6/c, wt. 17 lbs.---	.75			

*No. 635 at Lynchburg, round style only

WINDOW CARTONS



These beautiful pink and green cartons with a large cellophane window show up section honey to the best sales advantage. The color combination blends wonderfully with the white comb surface and the large window shows an enticing area of honey comb to the buyer. Flowered around the edges with clover blossoms and completely enclosing the section, these cartons surely help sell honey for more money.

- 644—4¼"x1⅞" Beeway
- 645—4¼"x1½" No Beeway
- 646—4"x5"x1⅞" No Beeway
- 100, \$1.00; 500, \$4.50
- 1,000, \$8.75

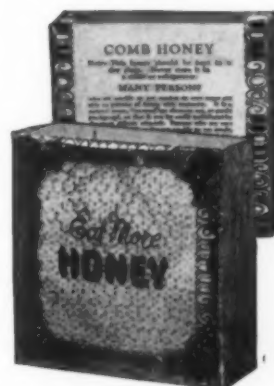
Weight 6½ lbs. per 100; 55 lbs. per 1,000. All postage extra

REVELATION COMB HONEY WRAPPERS

	100	500
649—Colored 4¼, Blue and White-----	\$.90	\$3.95
664—Plain 4¼ -----	.60	2.70
658—Colored Bag 4¼-----	1.05	4.35
430—Bag filler device, weight 2 lbs.-----		.50

Above postage extra. Weight, 100—1 lb.; 500—5 lbs.

Ask for our general catalog too if you wish other items.



G. B. LEWIS COMPANY : : : Watertown, Wisconsin

BRANCHES: COLONIE & MONTGOMERY STS., ALBANY, N. Y.; 1117 JEFFERSON ST., LYNCHBURG, VIRGINIA;
214 PEARL ST., SIOUX CITY, IOWA

SEND YOUR ORDER TO OUR OFFICE NEAREST TO YOU

AMERICAN BEE JOURNAL

November, 1944 Hamilton, Ill. Vol. LXXXIV, No. 11

Editors: G. H. Cale, Frank C. Pellett, M. G. Dadant,
J. C. Dadant

Published monthly at Hamilton, Illinois. Entered as second class matter at the Postoffice, at Hamilton, Illinois. In United States, Canada and Mexico, \$1.00 a year; two years \$1.50; three years \$2.00; Foreign \$1.25 a year; two years \$2.00; three years \$2.75. Subscription stopped at expiration printed on wrapper.

BETTER BRED QUEENS - THREE BANDED ITALIANS

Thank you for your orders in 1944. Let us serve you in 1945
CALVERT APIARIES Calvert, Albama



Successful honey producers
pack and sell in efficient
Hazel-Atlas jars

HAZEL-ATLAS
GLASS COMPANY
WHEELING, W. VA.

Italian Bees and Queens for 1945 Delivery

100 AND OVER

2 Lb. and queen	\$4.00
3 Lb. and queen	5.00
Queen	1.50

All orders booked on 10% deposit

EUGENE WALKER

357 Indiana St. Gridley, California

BEE SUPPLIES

A. H. RUSCH & SON CO.

REEDSVILLE, WISCONSIN

Manufacturers

Jobbers

1945 Prices Italian Pkg. Bees with Queens

2-lbs. and queen \$3.75 ea.; 3-lbs. and queen \$4.75 ea.; 4-lbs. and queen \$5.75 ea.; Queenless pkg. 2-lb. \$2.85 ea.; 3-lb. \$3.85 ea.; 4-lb. \$4.85 ea. 20% down books order. Health certificate and safe delivery guaranteed.

HESSMER BEE FARM Hessmer, La.

Wanted

Man thoroughly experienced with package bees and queen rearing for 1945 season. \$200 per month.

F. E. Morrison

P. O. Box 320, Butte City, Calif.

Mr. Honey Producer

Join a progressive cooperative now and safeguard your future market. We need the honey at selling prices. You need us to safeguard the time when selling is hard. Join now.

For particulars write

Illinois Honey Producers Assn.
Mt. Sterling, Illinois

PACKAGE BEES FOR 1945

D. T. WINSLETT

1015 Sonoma Ave.
NO. SACRAMENTO, CALIF.

STOCK BRED FOR RESISTANCE

Use it, when it can be obtained, to carry forward your Victory campaign for disease control.

Iowa Beekeepers' Association
STATE HOUSE, DES MOINES, IOWA

THRIFTY BEES

Combless packages and queens
Three-banded Italians only
Thrifty bees are guaranteed to please

W. J. FOREHAND & SONS
FORT DEPOSIT, ALA.
Breeders Since 1892

Are You Planning for 1945 Pkgs.

Quality Three-Banded Italian bees and queens. Many of our customers are placing their orders now, we would advise you to do likewise and avoid disappointment later on. Subject to 1945 prices when released. Thanks a million for 1944 orders.

DUPUIS APIARIES

Andre Dupuis, Prop.
BREAUX BRIDGE, LOUISIANA

STATEMENT OF THE OWNERSHIP MANAGEMENT, CIRCULATION, ETC., RE- QUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912 AND MARCH 3, 1933.

Of American Bee Journal, published monthly
at Hamilton, Illinois, October 1, 1944.
STATE OF ILLINOIS,
County of Hancock, ss.

Before me, a notary public in and for the
state and county aforesaid, personally ap-
peared M. G. Dadant, who, having been duly
sworn according to law, deposes and says
that he is the business manager of the
American Bee Journal and that the follow-
ing is, to the best of his knowledge and
belief, a true statement of the ownership,
management, etc., of the aforesaid publi-
cation for the date shown in the above
caption, required by the Act of August 24,
1912, as amended by the Act of March 3,
1933, embodied in section 537, Postal Laws
and Regulations, printed on the reverse of
this form, to wit:

1. That the name and addresses of the
publishers, editors, and business managers
are:

Publishers: American Bee Journal, Ham-
ilton, Ill.

Editors: G. H. Cale, Hamilton, Ill., Frank
Pellett, Hamilton, Ill., M. G. Dadant, Ham-
ilton, Ill.

Business Managers: M. G. Dadant, Ham-
ilton, Ill., J. C. Dadant, Hamilton, Ill.

2. That the owners are:
H. C. Dadant, Hamilton, Ill.
J. C. Dadant, Hamilton, Ill.
V. M. Dadant, Hamilton, Ill.
M. G. Dadant, Hamilton, Ill.
C. S. Dadant, Hamilton, Ill.
R. A. Grout, Hamilton, Ill.
L. C. Dadant, Hamilton, Ill.
R. H. Dadant, Hamilton, Ill.
Louisa G. Sausier, Hamilton, Ill.

3. That the known bondholders, mortga-
gees and other security holders owning or
holding one per cent or more of the total
amount of bonds, mortgages, or other se-
curities are: None.

4. That the two paragraphs next above,
giving the names of the owners, stockholders,
and security holders, if any, contain not only
the list of stockholders and security holders
as they appear upon the books of the
company but also, in cases where the stock-
holder or security holder appears upon the
books of the company as trustees or in any
other fiduciary relation for whom such trustee
is acting, is given; also that the said two
paragraphs contain statements embracing
affiant's full knowledge and belief as to the
circumstances and conditions under which
stockholders and security holders who do
not appear upon the books and securities in a
capacity other than that of a bona fide
owner; and this affiant has no reason to be-
lieve that any other person, association, or
corporation has any interest direct or in-
direct in the said stock, bonds or other
securities than as so stated by him.

(Signed) M. G. DADANT,

Business Manager American Bee Journal.
Sworn to and subscribed before me this
10th day of September, 1944.

MINNIE S. KING, Notary Public
My commission expires Nov. 18, 1945.

ITALIAN PACKAGE BEES AND QUEENS

QUEENS FROM STOCK BRED FOR RESISTANCE

24 YEARS QUEEN BREEDERS. LOUISIANA'S OLDEST COMBLESS
PACKAGE BEE SHIPPERS

WE ARE OPEN FOR 1945 BOOKING

Special care and priority will be given to returned veterans having
empty stored equipment

Your choice of Italian Stock or Bred for Resistance Queens

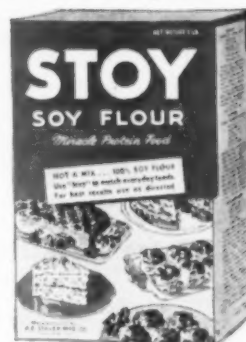
RED STICK APIARIES & CO.

Main Office 125 Lessard Street, Donaldsonville, La.
TELEGRAPH—WESTERN UNION

Honey Production Almost DOUBLED!

"Beekeepers may almost double
their honey production by feeding
pollen and soybean flour early in
the spring"—American Bee Journal,
July, 1944.

Start trapping pollen now for early spring
feeding with soy flour! STOI Soy Flour is
now available at your grocers. Send for free
literature describing scientific experiments,
tested methods of trapping and feeding...
sure-fire results. Write today to: A. E. STALEY
MFG. CO. Dept. B. Decatur, Ill.



STOI SOY FLOUR

AT WHOLESALE AND RETAIL
GROCERY DISTRIBUTORS FROM COAST TO COAST

FOUR STARS, Reason Enough

- ★ Superb Italian Queens and Package Bees offered as the result of
over a quarter century of exacting selection.
- ★ Stock Bred for A. F. B. resistance if desired . . . Your choice.
- ★ Honey Crop insurance of the finest quality.
- ★ Satisfaction guaranteed.

2-Lb. package with queen \$3.70
3-Lb. package with queen 4.70

Prices subject to change without notice.

Reference: St. Lucie County Bank, Fort Pierce, Florida

SUNNY NOOK APIARIES
BOX 97 FORT PIERCE, FLORIDA

Your Display or Classified Ad in A-B-J Brings Results That Please



This photo shows a portion of one of our queen yards containing over 6,000 nuclei

ITALIAN PACKAGE BEES AND QUEENS

2-Lb. with queen	\$4.00
3-Lb. with queen	5.00
Extra queens, each	1.25

BY EXPRESS

OVERBEY APIARIES, Bunkie, Louisiana

DEALERS ATTENTION

Carpenter's Electric Foundation Embedder

FOR

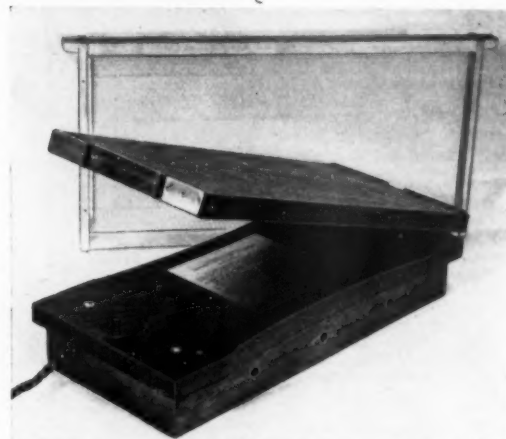
"BETTER BEE-HAVIOR"

IT'S COMPLETE—IT'S SIMPLE—IT'S SPEEDY—IT'S ACCURATE
A Bee-Man for over 40 years, perfected and patented this Electric Embedder. He has completely solved this difficult problem. It sells on sight. It is guaranteed-satisfaction or your money refunded. It will be a fast moving, money making proposition for the dealer. Order one or a dozen, on trial, right now! Terms 2%, 10 days, net in 30 days.

Retail Price \$10.00—Very Satisfactory Dealer Discounts

Send Order or Write for Information

Carpenters 4266 Homewood Court Riverside, Calif.



R-E-Q-U-E-E-N N-O-W

When you get your honey crop off and your bees are still gathering a little is an ideal time to requeen. The advantages are many; lots of young bees in the fall will insure better wintering, less spring dwindling, quicker spring build-up. Then, too, these young queens will give you less trouble with swarming next spring. Why not try it this fall?

PRICES ON QUEENS

Lots of:	1-24	. . . . .	\$ .90 each
	25-99	. . . . .	.85 each
	100 or more	. . . . .	.80 each

THE STOVER APIARIES
MAYHEW, MISSISSIPPI

*In
Appreciation*

This advertisement currently appears in The Times, Daily News, Herald-Tribune, World-Telegram, Evening Sun and Journal-American in New York City and in the Philadelphia Bulletin, Baltimore Sun and Washington Star. The accomplishment it records was possible only because of the loyal cooperation of American Beekeepers, Honey Packers, Dealers, Shippers. It is reprinted here in grateful tribute to these members of the Honey Industry, our long time friends.

KEEPING FAITH!

★ ★ ★

WITHOUT compromise, for a quarter century, the supreme goodness of America's premier honey . . . GOLDEN BLOSSOM HONEY . . . has been rigidly maintained. Through these long years, tens of thousands of women have come to trust GOLDEN BLOSSOM as *uniformly* the most delicious honey anyone can buy. Ever mindful of the obligation this imposes, we published in the early days of war, February 9, 1942, this pledge:—

"... we shall not allow profit motives, nor any other consideration, to cause us to deviate in the slightest from GOLDEN BLOSSOM HONEY'S well-known and carefully guarded excellence ..."

Please keep that pledge in mind as we report to you the following facts:—

In the hive-production of de luxe honeys . . . orange blossom, sage, white clover . . . the current year is one of the worst in history. To obtain sufficient amounts of these rare, flavor-perfect honeys for GOLDEN BLOSSOM'S exacting formula loomed as a superhuman task.

But months ago, even though faced with the seemingly impossible, we began to redouble our efforts in your behalf. Our executives and veteran honey experts set out to comb and recomb every nook and corner in the land. By bus, train and airplane they searched and traveled, traveled and searched.

No possible source of fancy honeys was too remote, too small for scrutiny.

Today, we are happy to tell you that thanks to America's great body of generous Beekeepers, this long, arduous search has been richly rewarded.

These Beekeepers, digging down to this season's last, precious pound of extra fine honey, have now made available to us . . . and to you . . . limited stocks of the most flavor-flawless honeys it has ever been our privilege to offer you under the GOLDEN BLOSSOM name.

Thus, each coming month, we will be able to apportion an adequate supply of GOLDEN BLOSSOM HONEY to your favorite Grocer. This means that, from now on, you can enjoy it regularly in your cooking and on your table . . . can always be assured of enough of this extra delicious honey to meet your normal needs.

W. J. Paton PRESIDENT

The John G. Paton Company
INCORPORATED

630 FIFTH AVENUE, NEW YORK CITY

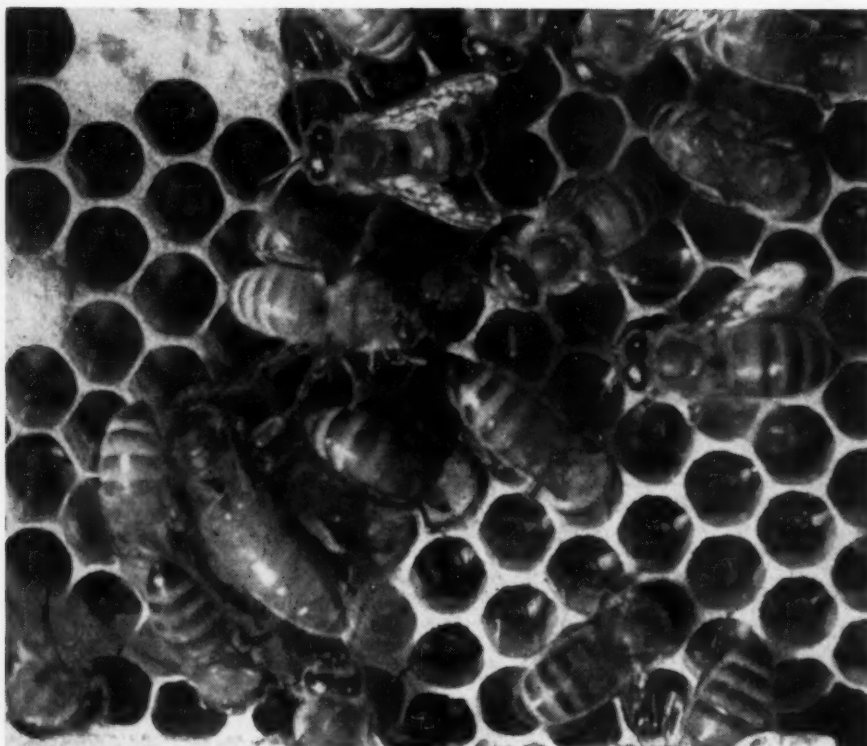
100% PURE BEE HONEY



GOLDEN BLOSSOM HONEY

NOVEMBER, 1944

375



HOW TO DO IT

FRAMES FOR CHUNK HONEY

Not being able to buy frames for chunk honey this past year, I made some, using regular scalloped section holders. Just nail another scalloped bar to the top of the end blocks and slit it with a saw from end to end. Drop a sheet of thin surplus foundation in the slit, leaving about an eighth of an inch above to crimp. Use sawed separators between the frames and super springs to hold all in place. This "frame," filled with honey, looks nice and sells well.

Harry T. Starnes,
Indiana.

— V —

FORGET THE STING AND TREAT IT LIGHTLY

The bad effects of bee stings are due to the way the stings are treated. Some people are immune to a degree. But experience has taught me not to get excited, to endure the pain and not to bruise or scatter the poison. Carefully remove the stinger with a knife blade by raking it off. Do not pinch the poison sacs with the fingers. Briefly, don't treat "em rough" and forget them promptly as soon as the stingers are out.

W. P. Kinard,
Mississippi.

TO KEEP WAX FROM STICKING

E. E. Salge of Texas writes about wax sticking to the embedder board. Wax will not stick if the embedder board is greased with salad-oil or bacon rind.

Felix Bloch,
Gan Hashomron, Palestine.

— V —

WAX FOR FOUNDATION

Take my advice small beekeepers. Don't sell your beeswax for cash. The change looks so small for the amount of work. Exchange it for foundation; what a difference! It is really an incentive to sound expansion.

Mrs. L. M. East,
Alberta, Canada.

— V —

HOW TO TAKE BEES FROM A TREE

Many people save bees from trees. After the tree has been cut down, here is an easy way to hive the bees: Split the log into halves. Set a hive across half of the log with a set of combs, but leave the bottom board off. Put an excluder on the hive and empty super. Remove the brood and comb from the other half of the log and set around

in the top super. In a day the bees will clean up all leaking honey and the bees in the other half will have moved up on the combs and you can put on the bottom board.

Harry T. Starnes,
Indiana.

— V —

MATCH STRIKER

Usually you are unable to find a place for striking a match. Glue a small emory strip on the smoker. You can light a match then anytime.

W. E. Wedemeyer,
Iowa.

— V —

EMERGENCY FEEDER

When in need of a feeder for feeding nuclei or packages it can be made from any can with the top removed. A tuft of wood excelsior is placed loosely inside a part of it extending up to the adjoining comb for a ladder. Take out enough frames from the hive body to make room for can. Pour the syrup into it and the bees will walk down the excelsior into the syrup.

Frank Johnson,
Wisconsin.

— V —

A HELP TO KEEP MOTH OUT OF QUEEN MATING NUCLEI

Place the little nuclei boxes in the open sun with screened ventilation. My experience seldom was one so placed bothered by moth. Those in the shade were often destroyed.

H. S. Leitner,
South Carolina.

— V —

TO REMOVE FOUNDATION FROM CARTONS

To remove sheets of foundation easily from the cartons in which they are packed, cut three corners of the carton, turn down one side and one end, pick up each sheet as needed.

Henry R. Seys,
New Mexico.

— V —

LEVELING HIVES

I prepare a leveler from a steel spring by bending a V for the fulcrum for lifting the low corner or end of the hive to position indicated by spirit level. I then fill in the required amount of soil with a masons trowel and tamp solidly with a 12 inch piece of 1 inch shafting. This levels the hives.

J. H. Sturdevant,
Nebraska.

WHAT IS YOUR HOW TO DO IT. Why don't you join in. For next issue, write out on a postcard some useful how-to-do it's of your own. There will be no blanks if they are really useful. For each item we will advance your subscription three months. If you don't hear promptly, you will in due time. We get many items.

TURPENTINE FOR BEE STINGS

Last year I used turpentine for bee stings and the cure was instant. I would like to give the benefit to others. Keep a one ounce screw covered bottle in your pocket while working with the bees and use it.

John J. Sullivan, Sr.
Minnesota.

— V —

SHALLOW FRAME COMB

I find it quite possible to produce a part of my honey in the shallow frame. When the honey is cut out, drained and suitably wrapped it finds a ready sale locally at a price ranging almost double the retail price of extracted honey.

This fills a demand which seems to be always ready for a limited amount thus increasing the number of satisfied customers.

J. H. Sturdevant,
Nebraska.

— V —

HIVING BEES EASILY

Immediately after a swarm clusters, take a hive with its bottom attached, place a few dark empty combs in the hive, suspend the hive or support it jam-up under the cluster. Watch the bees take to it like a duck to water. No need of cutting a limb or scattering the bees.

Quick support may be made by keeping two different size boxes or barrels around the yard. For a higher cluster a ladder or rope over a support permits one to contact cluster. In accessible places I put a few combs against the cluster, when they are loaded with bees transfer them to the hive. Then drum and smoke balance toward the hive. After most of the bees are in put on the cover.

W. P. Kinard,
Mississippi.

— V —

SALT FOR BEES

Sprinkle fine salt in the water that you put out for bees. I use wooden troughs with floating sticks. Keep them full of water and once a week sprinkle salt in them. My bees do not bother the neighbors and are constantly at these troughs. Three pints of water per colony a day. Double for those with two hive bodies.

N. J. Crickard,
West Virginia.

— V —

OUR COVER PICTURE

Judith Saugier, daughter of a certain long-legged guy who makes the pictures for ABJ. George found daughter Judy admiring the peonies and promptly unlimbered his "reflex," with never a thought that the rest of us would think her fit for a cover girl. But, here she is!

YORK'S Package Bees and Queens QUALITY BRED ITALIANS

With the 1944 season behind us we are looking forward and preparing for 1945. The past season was very unusual with many obstacles due to present war conditions, but in spite of all of that we managed to ship more bees than ever before. The demand was so great that we were booked up long before time to ship and consequently we had to return orders as fast as they came in. Production cost has soared to the breaking point and if quality is to be maintained, prices on bees will have to be increased as a defense to partly off-set higher expenses forced upon us by abnormal conditions over which we have no control. Our bees have won a national reputation with large and small honey producers alike through the years which result in many special calls for them. Improvement is foremost with us and our foundation stock is the best that can be obtained. Select breeding, good equipment and workmanship is essential for quality. Better bees is our goal and we appreciate your continued patronage.

We are booking orders now subject to new prices for 1945 which we are preparing and will have ready at an early date. It is safer to book early for better choice of shipping dates than to wait until too late. Present indications point to a large demand that will exceed the supply and if so an early sell out is anticipated.

YORK BEE COMPANY

Jesup, Georgia (The Universal Apiaries)

SINCE 1876

THE NAME (S. T. FISH) HAS BEEN
IDENTIFIED WITH
THE HONEY BUSINESS

S. T. FISH & COMPANY

Inc.

CHICAGO, ILL.

ALWAYS INTERESTED IN FURTHER BUSINESS—ADVISE US
WHAT YOU HAVE IN EXTRACTED HONEY—60 POUND CANS
PHONE MONROE 1910-11

"ABOUT TWO THOUSAND"

FINEST QUEENS AVAILABLE AT 80 CENTS EACH
Any Number

The dependable Three-Banded Italians. Place your order NOW.

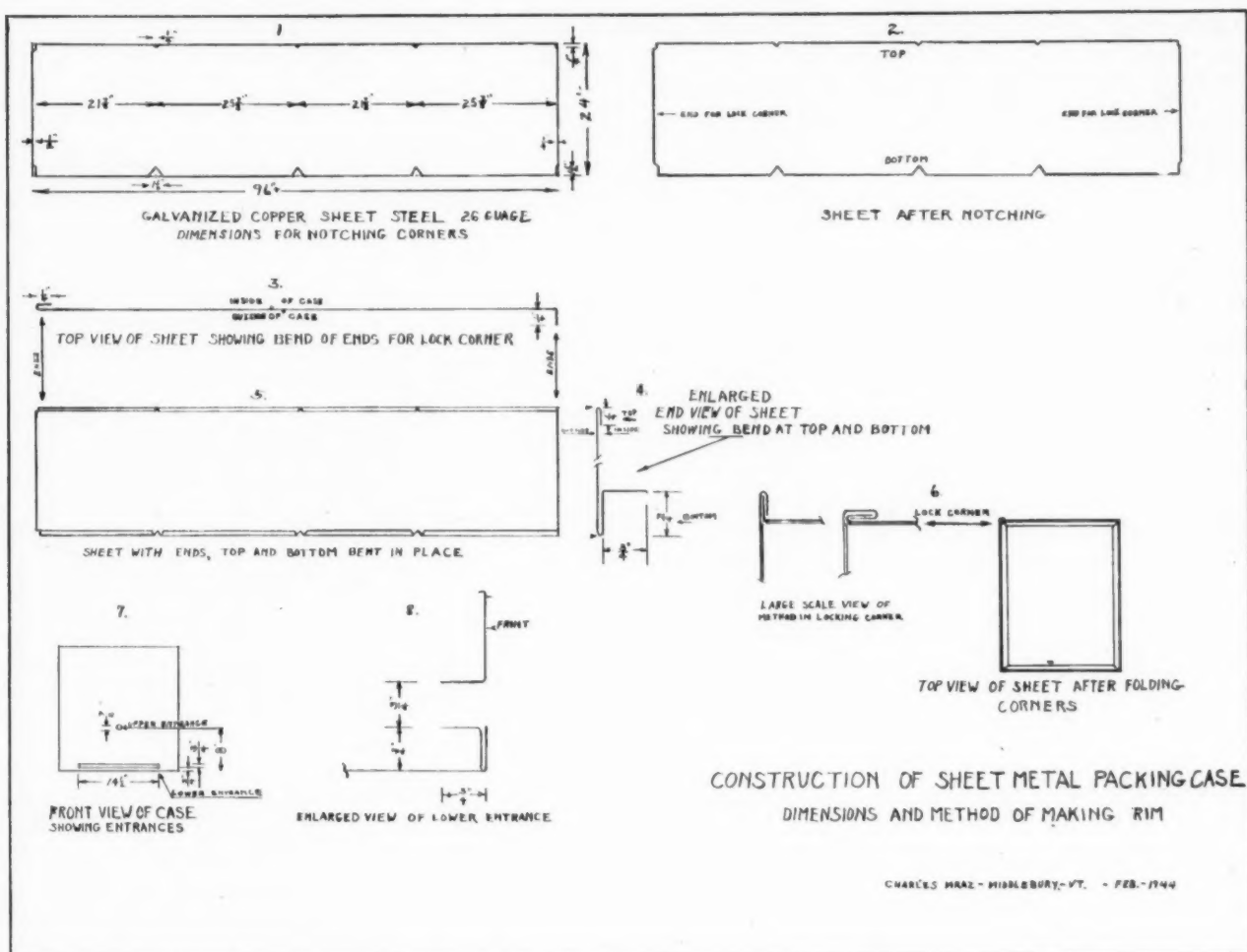
JOHN C. HOGG

Tifton, Ga.

More than 20 years a queen breeder

QUEENS

Daughters of Queens Bred for Resistance, with all
PACKAGE BEES FOR 1945 SEASON
EPHARDT'S HONEY FARMS, PLAUCHEVILLE, LOUISIANA



A SHEET METAL PACKING CASE

By CHARLES MRAZ

FOR about 12 years, I have used a metal packing case with good success and in response to many inquiries on its construction I am submitting this article to those who may be interested.

In the north, more bees are packed outdoors for wintering than any other method, and the tar paper pack is perhaps the most common. With

me, as far as labor expense and condition of bees is concerned, outdoor wintering is much to be preferred over cellar wintering. A lot may be said about how little honey bees use in the cellar, but the set back they go through just after they come out of the cellar offsets any advantages this may have. Aside from this, cellar wintering requires too much labor

moving bees and too much attention in the cellar.

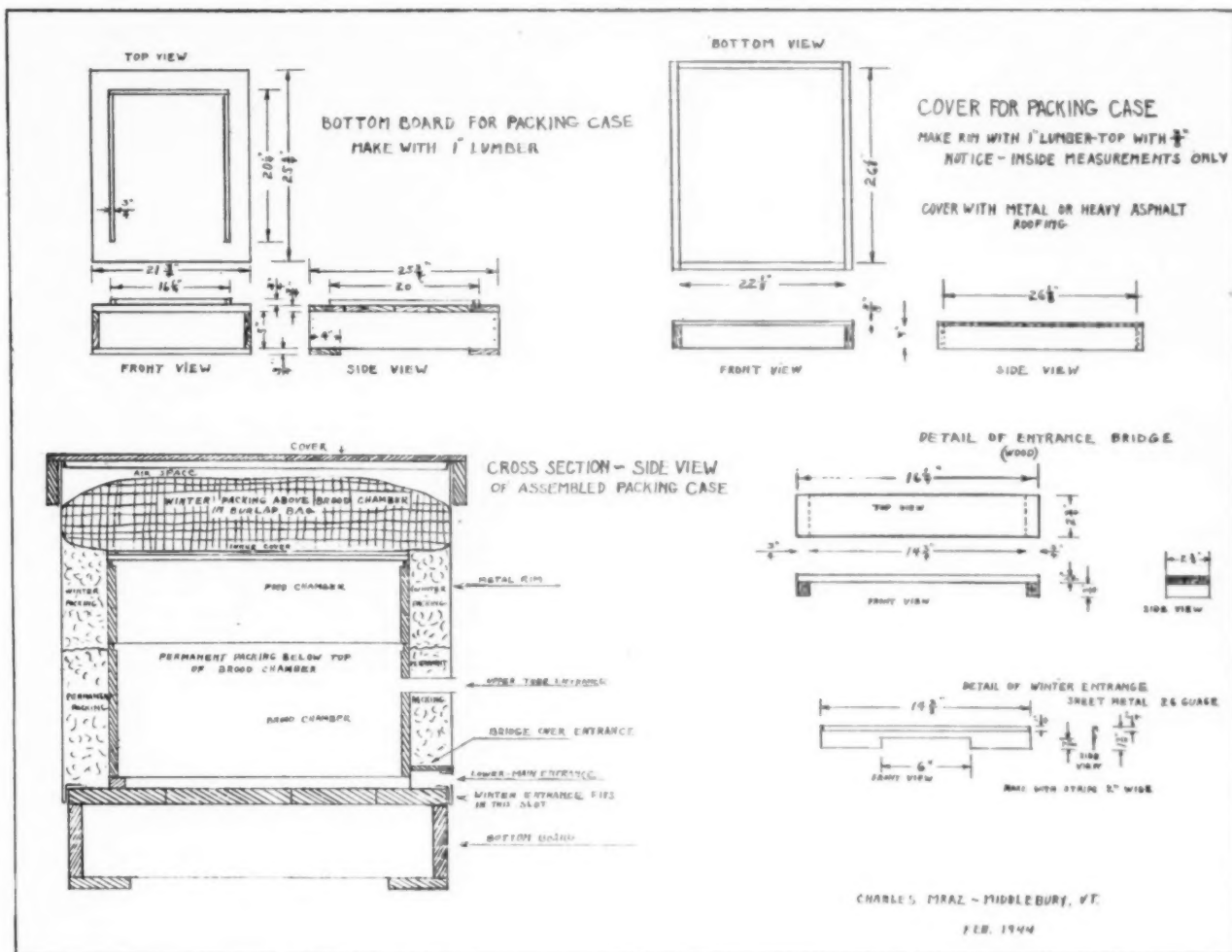
In Northern Vermont we have as much or more winter than any commercial beekeeping area in the U. S., and any type of packing that is successful here is apt to be successful anywhere. Our losses in wintering are very low in normal colonies. Our biggest if any comes in early spring



Number 1



Number 2



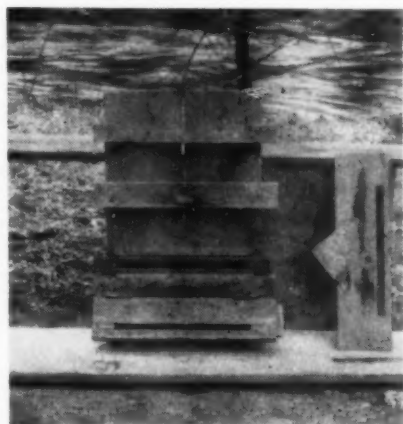
if weather is bad so bees cannot fly in April and May, bringing about some starvation and spring dwindling. As a general rule bees here never have a flight from November to late March, yet in spite of this long confinement, it is not unusual to go to a yard in March and find all normal colonies alive.

While the tar paper pack does a good job of wintering, its big disadvantage is the labor involved in packing and unpacking. With the permanent metal case, packing and

unpacking is a very minor job. Fifty hives can be unpacked in an hour without too much effort, by two

people. Packing takes about twice the time. In addition the metal case is sure proof against mice; over a period of a few years it is cheaper than tar paper, and by keeping the top packing in bags, hives may be looked into early in spring and packing replaced to give protection right up to the main honey flow if necessary. In addition, it has long life and gives permanent protection to the hive from weather. While it is impossible to get sheet steel at the present time, before the war the cost for an 8x2 feet sheet was about 70c each, and the labor to make up a case is very small with the proper equipment. Any one who packs bees for winter would do well to try a few of these cases when metal again becomes available.

The drawings and pictures amply describe the method of construction. It is necessary in making the metal rim to have available a breaker to make the bends at the top and bottom edges of the sheet metal. Every tin smith shop has such a breaker and its use can usually be obtained. In my case I borrow or rent it from the tin smith. In some cases it may be necessary to let the tinsmith do the bending. Unless one is a tinsmith



Number 3



Number 4



Number 5



Number 6

it will require experienced assistance to get the work started, and methods of making the various bends and lock corners.

The cover and bottom board being made of wood requires very little explanation. It can be seen the metal rim telescopes over the bottom board and the cover telescopes over the rim. This makes it easy to replace or change parts whenever necessary. It is most important that all parts be made standard size and very accurately to make this interchanging possible.

During the honeyflow when supers are put on the cover comes above the metal rim, leaving the packing exposed somewhat. Summer showers at this time do not seem to affect the packing to any extent if covers stay on, but simply wets the top which soon dries out. When covers blow off however, packing will get wet if there is any amount of rain. We do not seem to have much trouble in this respect. When packing, leave about an inch of air space between the top packing and cover to prevent condensation of moisture in the packing.

Follow the pictures:

No. 1. Sheet of galvanized steel used in making the metal rims, and board used in marking top and bottom notches. It is very important to make a template of this type so that all cases will be the same size and also save much labor. After marking, the notches are cut out with tin shears and the bends then made in the breaker.

No. 2. Bottom view of metal rim showing entrance and bottom bead after folding.

No. 3. A jig used to cut out the lower and upper entrances. The iron bars are spaced the width and length of the lower entrance. The location of the entrance is then marked with the board that is hinged just below this. After marking, the lower or main entrance is cut with a knife and hammer. In doing this, cut out only three sides of the entrance, the bottom and two sides. The opening is then made by bending back cut strip, making a shelf that prevents packing from leaking down the entrance. (See Fig. 8 in drawing).



Number 7

No. 4. The metal rim in place in the entrance cutting jig. The round upper entrance is cut with a tool made from an old file. The tool has two points, a longer round one for the center, and spaced a half inch apart a point ground to a sharp cutting edge. Putting this in a bit stock cuts a neat round hole very quickly.

No. 5. Bottom views of the bottom board and cover.

No. 6. Bottom board with hivebody and food chamber and bridge used at entrance, metal rim showing winter entrance and last in the row a cover with heavy roofing paper.

No. 7. Hive completely assembled with winter entrance to show its construction. A metal tube made by wrapping 3"x4" pieces of sheet steel around a 1/2" pipe is used in the upper entrance. This tube is forced into a 3/8" hole bored into the hivebody usually after hive is assembled.

Vermont.

— V —

PERFORMING BEES

Many people will have seen famous troupes of performing fleas—the unfortunate victims being made to draw miniature coaches along behind them by means of hairs stuck to their backs by gum—but there lived a man nearly two hundred years ago who exercised

uncanny power over bees. Without artificial aids, solely by means of his hands and voice, bees performed the most fantastic tricks imaginable.

He was a Mr. Wildman, of Plymouth, and was far-famed for his peculiar powers. In fact, on one occasion he was invited to perform at a Surrey garden party before a gathering of titled people. A countess had provided three hives of bees for the show.

First of all he demonstrated that it was possible to take honey from the hive without killing the bees, by displaying an empty hive in one hand and the bees from it clustered round his hat. His next trick was to attach the bees to his chin, forming the shape of a beard, after which he commanded the bees to re-enter their hive, which had been placed on a table on the lawn.

But what a scare to the noble lords and ladies when Mr. Wildman picked the bees up by handfuls, threw them about in the air, made them swarm amongst the bystanders, and finally spoke the word that caused them to return to their hive.

Mr. Wildman enjoyed a well-earned luncheon after all this, but entertained again in the afternoon with the three swarms of bees at the same time. First he would have one swarm on his head, one on his arm, one on his chest, then he would have the whole number of them completely covering his face, being led about as if he were blindfold. Then he rode a horse round the grounds of the mansion, again with his head completely swathed in bees, but this time with his eye uncovered so that he could see where to drive.

Finally, he capped his wonderful performances by marshalling all his bees on the table and marching them back to their respective hives like regiments of an army.

William Gummer,
England.

— V —

BUY A WAR BOND

AMERICAN BEE JOURNAL

A METHOD OF PROTECTING METAL EXTRACTING EQUIPMENT AGAINST THE ACTION OF HONEY*

By EDWIN J. ANDERSON and MERRILL WOOD

MOST large containers for honey such as storage tanks, extractors and strainer tanks are made of galvanized iron. Even large mesh screens for straining honey are built with this material. The question commonly arises as to what effect honey has on such containers, and, if the metal is absorbed by honey, how may the trouble be avoided.

In order to obtain some first hand knowledge of the relationship between honey and common metals, a number of types of sheet metal were cut into squares, each two inches on a side. The metals used were galvanized sheet iron, black plate (iron), copper, aluminum, and tin plate. In addition, some pieces of galvanized iron were painted with two selected types of lacquer and with one especially recommended aluminum paint. All the plates were carefully weighed then placed in honey. The honey with the suspended plates was stored for varying periods of time. During most of the time under test, the honey was stored at room temperature, but for limited periods of time, the honey was heated. The plates were removed occasionally, washed in distilled water and weighed.

The following procedure was carried out in regard to the handling of the plates and honey:

First, the plates were washed in distilled water, weighed and placed in the honey and kept at room temperature for 12 days.

Second, the plates were washed, weighed and placed in honey, then heated to 190° F. for two days.

Third, the plates were washed, weighed and placed in honey at room temperature for 12 days, then the honey was heated to 190° F. and cooled. The heating and cooling required an additional 3 days.

Fourth, the plates were washed, weighed and placed in honey at room temperature for two months.

Fifth, the plates were washed and weighed.

Weighings showed that of this group of metals black plate lost weight the most rapidly and aluminum the least. Galvanized iron lost considerable weight, tin plate a small

amount, with copper coming next to aluminum in resistance. All the metals showed some loss in weight. It is evident from these results that honey should not be stored in any of the common metals, and especially not in iron or galvanized iron containers.

The average loss in weight for the clean metal was:

Black plate	.....	.0997	of a gram
Galvanized iron	.....	.0451	of a gram
Tin plate	.....	.0095	of a gram
Copper	.....	.0016	of a gram
Aluminum	.....	.0005	of a gram

The writer recalls a visit to a honey house where an old extractor was being cleaned for use. It seemed doubtful, at the time, that a good job could be done of removing all corroded metal since considerable corrosion had taken place. The honey that passed through the extractor was so strong and bitter that it was decidedly distasteful. The results of the studies with the submerged plates showed exactly what happened to the galvanized iron in the extractor.

The painted plates showed more striking differences when removed from the honey than did the ones not painted. The aluminum paint did fairly well until the honey was heated, at which time the paint peeled from the galvanized iron. One of the lacquers, an air drying form, chipped off readily, and became soft when the honey was heated. A second lacquer gave excellent results under all conditions tested. It withstood the effects of heat without showing signs of damage. The plates did, however, show a slight gain in weight. The increase was not enough to indicate any significant breakdown in the lacquer. The increase in weight amounted to two one thousandth of a gram.

The results of this experiment indicate a decided need for protecting galvanized iron with lacquer. The lacquer which gave satisfactory protection for the galvanized iron plates was 4A lacquer which is sold by the Ault and Wibork Corporation of Cincinnati, Ohio. This lacquer has been in use on all galvanized honey equipment at the College for the last two seasons and shows no sign of wear at the present time.

4A lacquer has one disadvantage

since it must be baked on the metal at 350° F. The task should not prove too discouraging, however if the following procedure is carried out:

Clean the metal thoroughly with soap and water, then with a solution of ammonia, and finally with scouring powder until the metal becomes bright. The soap powder should be carefully removed with hot water. Sandpaper is necessary to remove the residue left by the soldering flux along all seams.

Small containers can be painted with the 4A lacquer and the containers baked in an oven at 350° F. for fifteen minutes. Larger containers such as tanks, extractors, etc. will not fit into an ordinary oven. Turn the larger containers upside down after they are cleaned and painted and rest the edges of the container on a solid foundation. Four supports, one under each side, will serve as a foundation. Place a large heater just inside the open face taking care that no wind blows against the tank, since it will blow the heat away. Any kind of heating unit may be used such as a gas or gasoline burner, oil stove or even strong electric units. A thermometer should be inserted into the outlet of the tank which is at the top when the container is inverted for the baking process. An old discarded rug or blankets may be used to cover the tank and increase the temperature within.

If a temperature of 350° F. cannot be reached with the heating equipment available, any temperature above 300° F. will do a satisfactory job of baking the lacquer on the metal providing heat be applied for a longer time or for about half hour at the lower temperature. It is best to let the tank stand for two days before applying a second coat since the lacquer seems to harden some during this time. At the end of the second day a second coat may be applied. This coat should be applied as quickly as possible and with little brushing. A spray gun will do the best job on either first or second coat. Lacquered tanks should be washed clean when not in use.

This process of heating the tanks may seem to be a big job but in reality does not require a great deal of time. If two coats are applied, the job will last for a number of years. Equipment lacquered in this way makes it possible for the beekeeper to produce a fine flavored honey, and honey that is free from any bitter metallic flavors.

*Authorized for publication on September 25th, 1944 as Paper No. 1249, in the Journal Series of the Pennsylvania Agricultural Experiment Station.

TRACING A SWARM

When going into the apiary, if you find a swarm out and you wonder where it came from, hive it. When the bees have gone in well, move the hive to a new place where the bees are not able to find it. If they did not come from a hive in that apiary, the stray bees will cluster on something near where they first settled, and remain there for several days.

If they did come from a hive in the apiary, they will return to it. By watching at the entrances, one can see bees there buzzing their wings as they alight at the hive from which they came. Open the hive and see if they have not swarmed. If you did a good job of it, you will find that you have traced them correctly.

You may now get the swarm, and place it on the spot from which it came, transfer the supers to the swarm, place the parent colony to one side for seven days, and on the seventh day while the bees are in the field, quietly move the old hive or parent hive to a new place.

If the swarm happens to be a second swarm, move the old hive away immediately at the time the swarm itself is hived.

Geo. H. Williams,
North Carolina.

BEEES AS A WEAPON

This clipping was sent in by W. J. Synott, of The Tanquary Honey Farms, Inc.:

"Just before the outbreak of the World War, a fellow named Sharp wrote an editorial in which he advocated that a hive of bees be sent to the kaiser of Germany, another to the prime minister of England, another to the "tiger" of France and still another to the president of the United States. Sharp contended that if he could interest these international leaders in beekeeping, he could have saved the world from war. The beeman, he reasoned, is one individual who gives more than he takes and whose activity brings greater prosperity to his neighbor than to himself. And that lesson he learns from the bee. The nectar from which the bees make honey is a waste product turned to good advantage. In their harvest, the bees render a service in pollination of flowers they visit of far greater value than the honey they bring to the hive. When the world learns that banditry does not pay and emulates the bee by attaining prosperity through service, wars will cease, said Sharp. And he may have something there."

— V —

WHO'S IT?

A romantic life with bees and beekeeping has been the lot of this professorish looking gentleman whose unadorned face has become familiar to so many American beekeepers that competition with him would meet a serious challenge. We fear to say too much, as we know, from past experience, that the power of analysis of many of our readers has been so excellent, they have able to remove beards and unmask the flight of years too readily not to take full advantage of every clue we can offer.

Who is this unknown? Send your answer before the 15th of November. If we can ever find time to get out from under the avalanche of replies, we will see that your subscription is extended three months for your answer to this try.

No more interesting feature has ever been found than "Who's It?" Editorially we feel that the feature has reached a high point of interest and should be stopped at the end of the calendar year and, that after the December issue, there should be no more "Who's It?" unless readers insist that they be continued.

The idea of having an old and a



young picture did not develop until the feature had been going some time. Other ideas have been presented such as two people who look alike and must be distinguished or some other phase of interest in personality which can be worked into the feature to continue its interest.

What do you think we should do?

Last Month, Elmer G. Carr,
Pennington, New Jersey

When we used Mr. Carr's picture, we had to take off the picture of his wife who stood right beside him, not out of discourtesy, Mrs. Carr, but because we thought the two together would be too much of a good thing, and many people would readily guess who our unknown might be. However, we did not know that the 28th of October was the Golden Wedding Anniversary of Mr. and Mrs. Carr.

Many happy hours have been spent by different members of our staff with this genial couple and all our readers I know will congratulate them on a long and happy married life. The present address is Elmer G. Carr, 106 Lanning Ave., Pennington, New Jersey. I am sure both of them will be glad to hear from any reader who feels, as we do, that they should be proud of an event which happens to so few.

Carr was long head of affairs in beekeeping in New Jersey, active in the Association, a queen breeder and a beekeeper, and active in organization for many years. He is a frequent attendant at national conventions, southern conferences, active in association work, nationally and locally. As a genial personality, he is hard to beat. The picture on next page sent in by C. L. Howk of East Orange, N. J., is a good representative moment in his smiling personality.

Replies picked up surprisingly this time, and yet there were probably more wrong guesses than with any other "Who's It?" we have had. Obviously, those who guessed Elmer G. Carr came mostly from New Jersey. Judging entirely from the picture, Charles J. Ledig, of Dover, recognizes E. G. Carr and Wm. P. Fritz of Orange, says that he was about twenty-two years old when the picture was taken and that he is now 72 years young. H. M. Conner of Stockton, exclaims, "not only is it Carr but to many of his friends, it is just plain "Pop Carr." Geo. M. Johnson, Pemberton, says, "It is Elmer G. Carr, former bee inspector for 20 years." Allen Latham, Norwichtown, Connecticut writes, "There is no mistaking the eyes, moustache and ears of Elmer." C. L. Howk, East Orange, N. J. (who sent the picture) writes, "The smile is accounted for by the dollar just received from a beekeeper in payment of dues as a member of our New Jersey Association." Milton H. Stricker, Maple Shade, calls attention to the Fiftieth Wedding Anniversary. T. W. Burleson, Waxahachie, Texas, recognizes him; and Mr. and Mrs. A. J. Hausenbauer of Hopewell, give him credit for his help when "we began our beekeeping and he was state inspector. We wish



E. G. Carr, at left, smiles as he takes in a new member of the New Jersey Association (Photo by C. L. Hawk). Left below, Carr as he is today. Right, about 1919, while New Jersey Inspector.



his continued success and extend him our best wishes." Fred Lesser, Fayetteville, New York, exclaims that "many years have passed since the picture was taken, but that he has been seen in New York State conventions many times."

But, oh, how many others you were thought to be, Elmer! R. Selwyn Wilson, Wendell, Idaho thinks you are Russell Kelty of Michigan. O. A. King of Virginia and Eldon Martin of Missouri honor Alan Latham of Norwichtown, Connecticut. A. M. Kennedy of Pennsylvania and Albert Carrier of New York thought Mr. Carr was the former Mel Pritchard, queen breeder of the A. I. Root Company; and Alvin Smith of West Virginia and W. H. Kelsey of



Connecticut identify him as Charles Mraz of Middlebury, Vermont. Albert Arrington of Virginia nominated Nathan Jensen of Jensen's Apiaries. W. P. Kinard of Mississippi guessed L. R. Stewart, Newport, Indiana. Joseph Garre of Wisconsin thinks it to be David Running of Michigan and Fourpine Apiaries, McKinney, Virginia, calls him J. H. Sturdevant. Harry T. Starnes and Grant Kitchen of Indiana thought that Carr was Morley Pettit, of Georgia and Ontario. V. O. Lee of Arkansas gave the palm to Herman Rauchfuss of Colorado.

CAUCASIAN BEES

Why do some get good results from Caucasian bees while some condemn them? Why is there so much said against this race?

Color has more to do with it than even beekeepers themselves admit. They have become used to the yellow and the black or the hybrids often crossed. They are timid about using Caucasians that most of the year can be worked without a veil and very little smoke.

The largest blunder with Caucasians lies in management. They are supered like the Italians or the blacks and this won't do. They want their honey compact and their brood compact and they are not inclined to scatter the honey or the brood all over. They provide the brood nest with honey, crowding the queen, even when there is still storage room on top of two or three full supers.

Now, here is the secret to larger crops with Caucasian bees. **Give storage room just above the brood nest.** Repeat this until it becomes second nature. Practice it and larger crops will be harvested than can be obtained under the same conditions with other bees.

Some have trouble separating frames or removing them from their fastening of propolis which is often between the frames and the bottom board. Use a $\frac{3}{8}$ inch entrance the year around. If a larger one is used, they will close it to suit themselves. Lay a board $1\frac{1}{2}$ inches wide or a lath on the rails of the bottom board making a tunnel. No propolis will be built to the frames and the tunnel will not interfere in any way with the flight of the bees. Caucasians will not tolerate a draft.

C. A. Bird,
Iowa.

— V —

ROADSIDE PASTURE

The roadside bee pasture has practically faded out of the picture as highway maintenance crews keep the highways streamlined. We remember in the horse and buggy days we used to pick bouquets while driving along. Sweet clover, goldenrod, asters, and many other flowers bloomed profusely on the highways. Now the roadsides are mowed one to three times a season, trees are cut down and never replaced, no fruit trees, berries, or other similar plants are used, and what plantings are put out do not survive the rigors of weather, insects and lack of care which they receive.

Alfred P. Johnson,
Illinois.

A CASE OF HONEYBEE DEPLETION AND INTERNATIONAL POLITICS

By E. F. PHILLIPS

FROM the beginning of this war, emphasis has been placed on the usefulness of honeybees in cross pollination of important crop plants. On the basis of this service by bees, most of the favorable governmental regulations have been established. Some beekeepers have thought that more stress was being placed on this aspect of beekeeping than is warranted, because commercial beekeepers virtually never include service of bees in pollination in their plans. Statements have been endlessly repeated regarding the services of honeybees, but in many cases these statements seem to have been accepted chiefly as expressions of enthusiasm by bee cranks. If one can cite instances where depletion of the honeybee population has been calamitous, the case may be stronger.

During the first world war beekeeping was considered unimportant in Germany and apparently no concerted steps were taken to safeguard this phase of agriculture. Honey production is commercially important in Germany only in a few small areas, but there are normally thousands of amateur beekeeping enthusiasts and the bee population is usually high. The common methods of colony management in Germany are much inferior to those of the more skilled beekeepers of this country. The needlessly complicated German hives are small and usually incapable of upward expansion, nor do they have adequate room for supering. They are poorly protected or unprotected from cold and often kept in houses where they get little benefit from sunshine. Because of these deficiencies, it is customary to feed sugar syrup each fall and spring, which precludes extensive operations. Such a combination of conditions means that if colonies are not under the rather constant care of a beekeeper, they soon decline. When German beekeepers left for the army, their colonies usually often went the way of all bee flesh, and by the close of the war the honeybee population was seriously decreased. There was found to be a serious deficiency in insects for pollination of fruits, legumes and other plants requiring insect visits for pollination.

Since only honeybees might quickly be brought back for this service, efforts were made by the Weimar government to encourage an increase in the number of colonies of bees and

to make it possible for bees to receive better care according to German standards. A few German beekeepers then tried out American methods of management, but this did not spread because of an intense national prejudice for the established German methods. A high internal revenue was then in force on sugar and to enable beekeepers to get sugar at lower cost for their never-ending feeding, sugar was denatured with dyes and sold to beekeepers free of tax. To American beekeepers it is somewhat amusing to assume that sugar feeding is the right way to develop beekeeping, but that is the only way by which Germans could meet this situation unless they abandoned their poor methods of management and their toy hives.

Those who desired to encourage beekeeping apparently sought an import duty on honey, high enough to keep honeys from other countries out of Germany, thus encouraging beekeeping in Germany with high prices for domestic honey. This was at first impossible, and honey from the United States and from other countries was imported in considerable amounts. Honey prices here by that time had declined from the high prices of the first war and our honey could be shipped abroad, pay the existing duty rate and undersell German honey. At this point a false scientific basis for controlling honey sales got under way.

The mere facts about what happened fails to explain reasons for later actions. By 1932 the beekeeping industry of Germany was dominated by a political appointee who was an ardent Nazi. His knowledge of bees and honey was amusing in its sparsity, but his knowledge of ways to gain favor for his party was more highly developed. By appealing to the national pride of beekeepers and by enabling them to get higher prices for their small honey crops, he managed to gain favor for his party, and that is why he was appointed. He had all the skilled investigators in the German laboratories at work on diastase in honey and identification of included pollen grains, and under his dictatorship they made extravagant statements about the importance of such work. As this story progresses, please keep in mind the Nazi dictator, since he is the one important member of the caste.

It is a matter of common

knowledge that honey contains numerous enzymes which can be detected by suitable biological tests. Of these enzymes, the most easily demonstrated is diastase, the complex enzyme which splits starch into sugars. Likewise of all the enzymes in honey, diastase is probably the least important to the honey consumer, but since the others were more difficult to measure, the honey enthusiasts of Germany began to shout loudly about the importance of diastase. Simple means were developed for making a rough measure of the diastase content of honey. Since heating of honey for straining or packing weakens or destroys honey diastase, and since many American beekeepers warm or heat their honey, American honeys shipped to Germany were often found deficient in diastase according to the arbitrary standards set up for the imported diastase content of imported honeys.

Great emphasis was placed on the damage to honey from heating so that the German domestic honey might continue to be sold on their markets. By means of this false emphasis, considerable amounts of American honey were denied admission to Germany. This worked to permit an increase in prices for the German domestic honey, thus to encourage the keeping of bees.

This undue emphasis on diastase led to work on this enzyme in honey in places other than Germany, some of it in this country. Great variation was found to occur in the amount of this enzyme in different honeys and also according to the care exercised in extracting. Since diastase in honey is probably not a component of the honey itself but is known to come at least in large measure from included pollen grains, which are a potent source of diastase, I excited the wrath of some German workers by pointing out that if a honey happens to be low in diastase content, this can quickly be remedied by adding about one cell of stored pollen to a 60-pound can of honey. This suggestion hit hard, since it indicated the weakness of the emphasis on diastase in honey.

Perhaps here it is appropriate to relate an incident on a trip to Germany in 1932. I took with me some specially prepared honey since I was sure that the German workers had never seen anything so fine. In his laboratory in Celle, Doctor Koch

asked for a small sample, and I promised it to him if he would conduct his tests on the sample while I was there, so that I might learn the techniques. My honey had been heated moderately and it just got under the wire according to the arbitrary diastase standards set by the Germans. One of the tests consisted of centrifuging the honey after dilution and an examination of the suspended solids for the identification of the pollen grains. The young woman who was making this test came into Koch's laboratory all excited and talking German a bit too rapidly for me to keep up. I asked what was wrong, and Koch said that she was exercised because my honey contained no "dirt," this being Koch's English expression and not my translation. We went to the laboratory and saw the material that had been centrifuged from my sample. It contained pollen grains of just the plant species that I had predicted but it contained no bee hairs, no bits of bee wings, wax or other debris, which they were accustomed to find in German honeys. Koch asked how we got these things out, and my reply was that we do not like such things in honey and that we pick them out by hand! After some kidding, I said that if they want the combination of a high diastase content and bee hairs, all that they need do is to leave the honey as it is extracted, but if they want to clean up the honey by eliminating bee hairs and other debris, as well as much of the useless pollen, it is necessary to warm honey to facilitate straining. Any reader can imagine how well this was received, but to that argument there is no answer.

The absurdity of the diastase standards apparently became so widely recognized that finally the Germans stopped talking so much about it. They finally obtained a new tariff rate amounting to about seven cents a pound, and that served to protect honey produced by the inferior management methods of Germany against competition of American honey produced by more effective labor saving methods. Meanwhile the colonies of bees had been brought back numerically.

These American beekeepers and exporters who had difficulty in shipping honey to Germany shortly after the first war probably did not realize that the trouble originated in a need of more honeybees for pollination. Those who studied the diastase content of our honeys in order to assist exporters in having their shipments accepted did not then know what was back of all this. Strangely enough, some of the honey investigators of Germany seem not to have appreciated the political significance of what was happening, and some of them

innocently made extravagant statements about the importance of diastase.

The chief moral to this tale is that neglect of beekeeping may bring sorry results which may be manifested in a vast number of ways. The beekeeping industry of the United States must never be thus allowed to decline, for with us the results would be even more serious.

There is a second moral which may be suggested. The Nazis tried to play politics with honey, and used false arguments and unsound scientific claims to support their schemes. After the war is over, some beekeepers may begin to demand high tariff for honey and beeswax and if this occurs, they will probably make unsound claims. There are already demands for "protection" against imported honeys, but if we are wise we shall keep honey and bees out of the scheme of international politics. There is no need for us to model our actions on those of the Nazis.

New York.

— V —

MORAL: DO A GOOD JOB

I had a bad case of American foulbrood in my apiary which about wiped me out. In cleaning up hives, covers and bottoms, I did not do a thorough job, through some error, which brought it all back again. After the clean-up I took a job elsewhere and on return found I had only ten colonies of my bees left out of forty-eight. Another man and I killed all these off and cleaned up all the equipment of some seventy hives and a couple of hundred supers. We also cleaned up some five hundred colonies and several thousand supers for a beekeeper who had made the mistake of feeding honey in the spring from a foulbrood yard to the rest of his outyards.

With this I have had enough experience to make me careful hereafter.

In this later clean-up, every article of equipment that was used was steamed for half an hour under pressure in two large vats. In the work we wore canvas rubber-dipped gloves, two pair, one for the foulbrood equipment and one pair for the clean equipment that came through a large tank two thirds full of a caustic solution of boiling hot lye water which ate the paint right off. The solution was kept at the boiling point all the time by live steam pressure. We were very careful not to handle clean equipment with the gloves used for handling the diseased equipment.

We had a clean wheelbarrow with

a long platform and handles which held about eighteen to twenty supers at a time and we hauled them out after treatment in a large pile, stacking them up.

We also had a large barrel of clean water into which we dunked the supers to wash off the lye and material left stuck to them from the other solution. We kept adding water in the barrel to keep it two thirds full all the time so that we could sink the supers completely under.

The work was done in the winter and early spring. We got a couple of tons of wax. We burned up all the frames. It is hard to do a thorough job, cleaning up this equipment unless you are well equipped for it. Too many make a mistake somewhere along the line.

Lewis K. Lawrence,
North Dakota.

— V —

ENGLISH BEEKEEPING DIFFERENT

Beekeeping in this part of the world is different from the pictures and articles published in the Journal. I am well satisfied with one tenth of the crops your beekeepers seem to get. I have noted that you have illustrated letters from this country. I wish I could send you a picture of my apiary. I invite any beekeeper on active service to write me at my address and I will try to spend a little time with him. I will arrange to meet him and show him bees and equipment.

Edward Mayor,
1, Ferndale
Wood Lane
Heskin, Nr. Chorley, England.

— V —

SEMI-RADIAL HONEY EXTRACTOR

Pender Bros. Pty. Ltd., of West Maitland, New South Wales, Australia, have a semi-radial honey extractor placed on the market. Baskets with separator plates between are set at an angle, overlapping each other, which allows the inclusion of more baskets in a smaller sized extractor can. It has an automatic reversing mechanism at the center which causes the baskets to reverse immediately on application of the brake. The top of the reel has no cross bars to interfere with the loading and unloading of combs.

Apparently, the application of the centrifugal force is the same as in a Radial extractor, but the combs are reversed automatically, as in the present type of reversing machine in this country.

EDITORIAL

THIS CHANGING WORLD

PRIOR to World War One, agriculture seemed ready to settle down to a regular routine which would permit the beekeeper to anticipate his prospects with reasonable assurance. Of late however, changes come with such frequent regularity as to remove all semblance of security for bee pasture.

The first World War brought such a heavy demand for grain as to bring about the turning under of millions of acres of meadow and pasture. Large areas which should have been left in grass were put to the plow. The unbalanced planting resulted in disaster in many localities. Erosion by both wind and water destroyed countless acres of once productive land.

Following the first World War came the replacement of horses by automobiles and tractors thus reducing permanently the area needed for pasture. Next the combination of drought and depression resulted in the loss of their farms by many once prosperous owners.

Agriculture was only in the early stages of recovery from this series of disasters when World War Two upset everything again. A second time we have seen meadows and pastures plowed up to give place for crops necessary to meet the urgent military demand.

The result of such rapid change in the farm situation has put the beekeeper in a difficult position. The locality that offers an abundance of bee pasture in one year may provide poor dependence the next. The end of the war should result in some improvement for him since many tilled acres will be planted to clover again.

— v —

BEEES IN THE ORCHARD

SINCE fruit growers have come to recognize the value of bees in pollination, the beekeeper is finding more favorable conditions in orchard districts. The loss of bees from spray poison caused many beemen to move out of orchard locations much to the disadvantage of the fruit grower.

Now we read with much interest of recent experiments at the Rothamsted Experiment Station which show that sprays which contain lime-sulphur, nicotine sulphate or copper sulphate

are strongly repellent to the bees. Open apple blossoms sprayed with lime-sulphur solution as weak as one per cent are reported to have repelled the bees for as much as seven days.

"The Minnesota Fruit Grower" raises the question as to whether the application of such a spray just before the blossoms open might interfere with the pollination of certain varieties of plums which are not too attractive to the bees under favorable conditions.

It is encouraging to note that fruit growers are endeavoring to find controls for fruit insects which will not at the same time destroy the honeybees on which they depend for pollination.

— v —

ORIGIN OF TREFOIL

BIRD'S-FOOT Trefoil is a new crop in this country. It was first recognized as a possible addition to the forage crops by Johnstone-Wallace who found it growing in Albany County, New York, about 1934. Prior to that time botanists had recorded wild plants about 1900.

Circular 625 of the United States Department of Agriculture states that when and how it was introduced in these areas is not known. A book issued by Rutgers University in 1941, entitled "Ploughs and Politics" includes Charles Read's Notes on Agriculture. There it is recorded that a Captain Reeves brought 15 pounds of trefoil seed from London in May 1756. It hardly seems possible that plants from this early importation could have survived so long without notice.

Indications are that how the plant finally came to this country to stay will never be known.

— v —

THE HONEY PLANT COMMITTEE

A meeting of the committee investigating the honey plants for the National Federation of State Beekeepers' Associations met at the Boyce Thompson Institute on September 30. Six of the nine members were present and a comprehensive program of research and development to be recommended to experiment stations, The United States Department of Agriculture and other public agencies, is in preparation for presentation to the parent organization.

It is apparent that progress in any program of

bee pasture improvement depends upon a better understanding of the factors which control nectar secretion. So little is known about this subject that a study of the fundamental problems is very much needed.

Selection of strains of clovers, alfalfas and other important sources of nectar for increased nectar yield offers promise of increasing pollination through insect activity. The increased yield of nectar which attracts the insects will at the same time provide larger honey crops for the beekeeper who owns the bees.

Fruit growers and seed growers now recognize the fact that their interest and that of the beekeeper are mutual, and cooperation should not be difficult.

The planting of nectar bearing trees and shrubs along highways, parkways and streets as well as the proper use of waste lands are under consideration. Since the conditions best suited to one locality are of little value in others it will be necessary to offer somewhat different suggestions for widely separated regions.

— v —

NITROGEN FOR ORCHARDS

MANY fruit growers are finding proper fertilization of their orchards to offer a serious problem. With continuous cultivation there is much loss of commercial fertilizer through runoff when heavy rains come. Erosion of the soil is also serious.

Since nitrogen is the element most often lacking there is a tendency to seek to provide it by means of shallow rooted legumes. Alfalfa is used to some extent in orchards in irrigated regions but it draws heavily upon the moisture in the soil and for this reason is not so much used in the eastern states. It roots deeply and requires plenty of water.

Some of the new creeping legumes such as the big trefoil, (*Lotus major*) and possibly *Trifolium ambiguum*, may prove useful in localities where they prove adaptable to local conditions. Both are new to orchard districts and until they are given extensive trial there is no assurance that they will succeed.

If such ground covers should come into common use the orchards would provide good bee pasture at a season when the danger of spray poisoning has passed.

MORE HONEY AT LESS COST

A few years ago there appeared a booklet entitled, "More Honey at Less Cost." The object was to show that with the large hive more honey could be produced with a given amount of labor. Since labor represents from one third to more than half the cost in honey production it is highly important to reduce it as far as possible.

Less manipulation is necessary with the large hive and is therefore a labor saver. There are a number of other things also which serve to reduce labor and thus to lighten cost of production. Disease resistant bees remove the necessity of much of the cost of replacement of burned equipment and save much time as well. Such stock has proved its value in many large outfits.

Poor combs are poor property and should be removed from the hives and replaced with full sheets of foundation at a time when good combs are readily built.

Low production costs determine the profit in honey production as in other business. In times of low prices the man who keeps down his costs is prosperous while the high cost enterprise is in distress. Since history repeats itself we may expect that low prices will come again and perhaps sooner than we think.

— v —

HIVE STANDS

A good and cheap hive stand can be made from composition roofing cut into convenient sizes. When laid flat upon the ground it will last for two or more seasons and serves a good purpose in keeping down weeds and grass from the entrance of the hive.

After trial of many things from cement to tar paper the roofing seems to meet the need at less cost and with less bother than anything else within easy reach. Cement stands are expensive and useful only in locations where the hives are to remain permanently. The roofing can be taken up and moved without bother if there is occasion to move the apiary to a new location. The sheet should be cut large enough to provide a clear space of about a foot in each direction from the hive.



Irrigation canal in the San Luis Valley in June. By July 15th the canal may be empty, and crops dependent on wells or rain; yet water may be within a few feet of the surface and pumping will deliver it for irrigation. (Photo by Ben M. Knutson, Alamosa, Colorado.)

ITEMS FROM EVERYWHERE

BEEES FOR BONDS

J. J. Hoyle, a Marion County, Arkansas farmer, is using a diversified system of farming with a well-planned live-at-home program to make a living and buy war savings bonds. Mr. Hoyle lives on a typical Ozark mountain farm of 260 acres. His income is derived from the sale of cream, beef cattle, pork, honey and eggs. Born in Benthams, Yorkshire England eighty years ago, Mr. Hoyle takes great pride in buying war bonds regularly and using his bees for the purpose. He has twenty-five colonies that bring in an income of from \$50 to \$75 a year.

During a recent auction sale, Mr. Hoyle donated 5 pounds of his prize honey which was sold at auction for \$800 worth of war savings bonds.

John Q. Adams, Chairman
War Loan Committee.

— V —

BEEKEEPERS FACE POISON PROBLEMS

A newspaper clipping with this title is sent by Thos. H. Rownes, of Walla Walla, Washington, which recites the plight of Yakima Valley beekeepers who face losses from poisonous dusts and sprays in that valley. Dusting by airplanes will be increased this

year by potato growers. The Central Washington Association is asking county extension agents to urge the use of repellents in the poison to keep bees from collecting it.

— V —

ARE DIVISIONS THE BEST FOR HONEY YIELD?

Are divisions ever the best for honey yield? I say no. It is best to use a two-queen or the Demaree plan as the means of drawing the extra bees up out of the brood nest even where the flow is slow, long and late in coming.

In order to utilize the services of the overflow of young bees and to prevent crowding and loafing, I have met with good success through the use of a two-queen method. However, if we ever get one of those 200 pound flows, it may be quite out of the question to attempt to build up and carry the enormous crop on one hive body of the two-queen system. Suppose a skunk undermines one side of the hive or the wind starts rocking it. Either may throw the entire stock of honey and bees overboard. I once had a three story hive undermined with a little civet cat. The hive leaned

against the nearby one and so escaped toppling too far until I found it.

J. H. Sturdevant,
Nebraska.

— V —

HONEYMEAD

Alvin W. Schultz, of St. Ansgar, Iowa sends two clippings of the Honeymead Products Co. of Cedar Rapids, one advertising "Honeymead Start-Lets" for chicks, a prepared feed with vitamins calculated, and, as the advertising said, "fortified with dextrose, the energy sugar." There is not much honey about it. The other advertisement is for "Honeymead Soy Flour" for table use, for enriching soups, meats, gravies, vegetables, fish, bread, pies, cakes, pastries and puddings. Of course it is a soybean flour, no honey in it.

This is a perennial with bee-keeping. Should any product be called in part "honey" if it has no honey? Apple honey is a case in point. Many think that the new apple syrup should not be called apple honey. Therefore, there should be no honeymead product nor no apple honey product, nor no honey syrup with other things added. Many of the honey syrups have actually contained honey even if in small amounts. We know of one case, where a honey bread so-called contained not an ounce of honey.

There is one thing that cannot be denied. Any use of the word honey is a concession on the part of the manufacturer that honey is a wholesome product and a magic word and the least we can say for advertising or publicity about these names is that honey receives a generous advertising notice whether or not honey itself is included in the product being distributed.

So it becomes a question of whether to shut off what is actually favorable publicity, or whether to try to stop the use of the word honey in any and all instances in which honey is not involved.

— V —

THE BEST WAY TO SAVE SCRAP WAX

When working with bees, I save scrap wax by wearing a large apron in which are large pockets to receive every possible scrap and scrapings which are small enough to go into them. For larger pieces, I carry a box or an old wash boiler with a cover on my pick-up and put the collected material in this. All this material is placed in the sun melter whenever the weather is warm enough to operate it.

If too much is gathered to be melted promptly, I dump the accumu-

lation in a barrel and cover them with water. The mass soon sours and the wax along with other refuse rises to the top, and is in much better condition for the melter.

If the sun is not hot enough to finish the job in the sun melter, the work can be taken care of in the honey house during a rainy day. Then the wax and accumulations are shoveled into burlap sacks and melted in any convenient tank or an old wash boiler if large enough. It is surprising the quantity of wax gathered during a season by this means.

J. H. Sturdevant,
Nebraska.

— V —

NEW OHIO BULLETIN

A new bulletin just out distributed by the Extension Service of the Department of Entomology and Zoology of Ohio State University is entitled, "Bees: Maintenance of Colonies, Control of Colony Population for Honey Production and Pollination." The bulletin which is illustrated and occupies 32 pages is written by W. E. Dunham, Extension Apiculturist of Ohio State University, with whom our readers are well acquainted.

Mr. Dunham discusses the eight factors controlling colony population and then proceeds to give a seasonal description of the beekeeper's year beginning with the pre-spring examinations and the preparation of a colony for the harvest, including build up, disease inspection and preparation for supering. This is followed by "The Harvest Period" with swarm prevention, maintenance of colony morale, desirability of comb space as major considerations. Also systems for extracted honey production are briefly described as well as comb honey production. This is followed by fall management of the apiary including proper queen and bees, comb space stores and management of inferior colonies.

Wintering the bees covers the final paragraphs, with preparation for wintering and various methods of winter protection.

Then there is a short discussion of food chambers and of queens and queen rearing.

— V —

HONEY FOR ENGLAND

Honey producers in Manitoba are again being asked for donations of honey to be sent to England. For the fifth year the Canadian Red Cross is arranging for shipments. Other provinces contribute fruit, jams and jellies, as well as honey. From the Manitoba division, more than 1,500,000 pounds have been shipped since 1940. The honey is distributed to children's homes, hospitals and medical centers. The Manitoba Co-

operative Honey Producers Ltd., 123 Bannatyne Avenue, Winnipeg, have donated their services for processing, pasteurizing and packing. Donations should be sent marked "Gift to Red Cross."

F. H. Fullerton,
British Columbia.

— V —

BULLETINS ON BEE-KEEPING IN INDIA

"Beekeeping In India: Elementary Practical Guide" by R. N. Muttou of the Bhupen Apiaries is before us. It is a thirty-two page booklet. Four species of bees are found in India of which the *Apis indica* is the most prevalent. This has cells much smaller than our bees, *Apis mellifica*. The bulletin gives beginners information on the inmates of the hive, the bee colony and its nature, swarming. Then compares the old methods of beekeeping with the new or modern movable comb method, with an explanation of various equipment as generally used in India.

Information is given on apiary location, hiving swarm, the transferring of wild colonies, and manipulation of bees to build them for the honey crop and prevent swarming.

On uniting, increasing of colonies, difficulties with robbing and various enemies of bees, together with some of the literature of honey plants, is included.

A second bulletin, "Beekeeping In India, Its Past, Present, and Future" is of the same author as above and represents reprinted articles from the Indian Bee Journal and is distributed by the All-India Beekeepers' Association. This bulletin of 28 pages likewise describes the various bees and the honey plant conditions in India, and is an exposition of the desirability of an increase in modern beekeeping to accentuate the service which may be done by honeybees for agriculture and horticulture. A summary is also given of the extent of beekeeping in India compared to foreign countries and the possibilities which develop, together with the annual loss suffered by Indians through lack of proper beekeeping methods. Beekeeping is stressed as a vocation as well as an avocation. But the author does not leave out the difficulties of rearing bees in the plains of the United Provinces of India, together with some suggestions thereon.

— V —

LOSS OF BEES FROM CALCIUM ARSENATE

In "Timely Topics for Beekeepers," from the Division of Entomology of

the University of California, reports are given of the loss or injury to many apiaries due to the broadcasting of calcium arsenate and other poisons by means that do not confine the poisons to the fields being treated. This question of loss of bees from dusting and poisoning of various kinds in many places is becoming a most serious one and it is quite apparent that the beekeeping in large sections of the country will be permanently injured as a result of such practices if they continue unabated.

— V —

POLLEN SURPLUS

My attention has been brought forcefully to the fact that there are no hard and fast rules in beekeeping. Ten of my colonies had been sent to an outapiary in the summer and came back fairly strong and heavy, with a report that they had been working on salal during October. Seeing they had adequate stores, they were left for a while. When I did look at them, it was obvious that they must be fed immediately. When the bees of the colonies came out for short flights, it was obvious they were suffering from dysentery.

I opened up some to see if I could determine the cause, and found that they had no stores, but as many as fourteen to fifteen frames half full of pollen. Apparently, their dysentery was coming from this.

Although now we emphasize the importance of pollen in the hives for spring brood rearing, this was a case where we had so much that we did not know what to do with it. I have a number of supers full of combs of pollen and if I give it to the bees, they either leave the combs alone or tear them down to the midrib, or make holes in them. I will know at least enough in the future not to judge a hive's condition in the fall by its weight. It may be pollen, not honey in this part of the country.

David Scholes,
Victoria, British Columbia.

— V —

BEES IN THE ORCHARDS

William Ferguson, in his syndicated "This Curious World," tells the story of a 22 year old orchard in Michigan that had never grown more than 1,600 bushels of fruit in a single year, but which produced 4,000 bushels the very first year after 200 colonies of bees were placed nearby during the blooming season. This item is sent by Fred H. May, Meredosia, Illinois from "The Illinois State Register."



Sumac, by Edgar Abernethy, Stanley, North Carolina.

THE ANSWER

THE QUESTION?

How do you move bees a short distance?

TO move bees a short distance, move the strongest colonies first; if possible, move them from near weaker colonies. The bees returning will thereby strengthen the weaker colonies. Continue this plan until the one weakest colony is left to be moved last. This will tend to strengthen your weaker colonies all through the moving operation.

The usual advice is to place a slanting board in front of each colony which has been moved to cause the bees to mark the location. In my experience, this is of little value. If you put enough dead grass at the entrance of each hive to cause the bees to work their way out, few bees will return to the old location. Just pile the grass up loosely, and move the bees in the evening, after they have quit flying.

I once moved ten colonies of bees less than two blocks, from an open sunny location to a rather deep gully where they were shaded and completely surrounded by tall trees. This caused the bees to mark their new spot so well, I doubt if a single bee went back—only a few drones.

E. M. Cole, Iowa.

CARRY the colony to its desired location and, in the place from which it was taken, put a similar hive with some honey and a little brood to catch the field bees. After a few days, the bees which have gathered in this hive can be reunited by the newspaper plan with the colony which has been moved. Destroy any queen cells that may have been started in the meanwhile.

Earl Emmons,
Michigan.

— V —

WHAT method to use depends on the nature of the move and the conditions which prevail and the number of colonies involved.

With a swarm just hived, I carry them to their permanent location as soon as they have entered the hive, giving them no chance to start marking the spot until I have them where I want them to be.

If I know the colony from which the swarm issued, I set it off about fifteen feet with its entrance in an opposite direction, and place the swarm on the old stand, thus joining the field forces. The parent colony

is gradually moved back to the old place, and on the third or fourth day it is close beside the swarm and the entrance in the same direction. During mid-day, about the sixth or seventh day after the swarm comes out, I move the parent colony to a new spot, preferably to the opposite side of the apiary. This is, of course, for the prime swarm and all unfinished supers are taken from the parent colony and placed on the swarm.

In moving a few colonies a short distance in the yard, take a time when the bees are not actively in the midst of a honeyflow if possible. A colony may then be moved to its new place late in the afternoon with boards or obstruction to mark their entrance. With some colonies, this works swell, and with others, it does not.

In the case of those colonies that return to the old spot in numbers, place on the old location any sort of a hive with an empty comb or two, late in the afternoon after the returning bees have been pretty well cornered. The hive may then be carried to the colony to which they belong and the bees dumped at the entrance. They show particular pleasure in joining their old comrades.

Another way is to use an old automobile tire, anything handy to set the hive on, with a pull cord and a short stick for a handle. Using this as a sled, the bees may be moved gradually to their new place. This carries the working force right along with the colony.

If you have an entire apiary to relocate, this can be done if they are taken to a spot three miles or more away from the old one and later moved back to the new but closer permanent location.

W. P. Kinard,
Mississippi.

— V —

I use two short pieces of 2x4 or 4x4 about 3 or 4 feet long in moving.

QUESTION FOR NEXT MONTH?

How do you deal with a really vicious colony of bees?

Question from T. P. Lalonde,
Wykeham House, Romsey,
Hampshire, England.

Get in your answer before the 15th of this month. Payment for answers will be made in cash, subscription extension, or as you wish. Make your choice when you send your answer.

the old
rth day
and the
n. Dur-
xth or
comes
y to a
pposite
course,
all un-
om the

a short
a time
in the
ole. A
its new
n with
k their
es, this
it does

es that
umbers,
sort of
or two,
the re-
ty well
nen be
ch they
ped at
rticular
nrades.
d auto-
set the
a short
is as a
gradu-
carries
g with

y to re-
ney are
or more
d later
closer

rd,
issippi.

or 4x4
moving.

H?
really
s?

alonde,
omsey,

ore the
ayment
n cash,
as you
e when

JRNAL

Nail 2 pieces of narrow board across the top to set the hive on. At one end put a heavy wire as a hand hold to pull with, and move the hive on this moving device as you would on a sled from one to two feet each evening until you get the bees where you want them to be left. I have used this plan for 25 years and I do not know of any better way.

H. W. Miller,
Kansas.

— V —

MOVE bees in early morning or late evening, before or after flight. When you have them where you want them, put pieces of scrap boards in slanting position in front of the hive so the flight of the bees is interfered with when they come out. Small split old shingles are excellent for this; or at outyards, I have used several sticks of old brush. Very little drifting occurs. I have used this method for several years. It is not original with us.

Stanton Smith,
Ohio.

— V —

IF the bees are to be taken from buildings or trees, this is properly a transferring job, yet such a colony will call for the same treatment they would have if they had been in a hive to be moved a short distance. Moving is best accomplished during a dark drizzly day, or toward evening. The colony may be placed on a moving screen or the entrance may be plugged with screen or with rags. If the moving must be done on a hot day, it is best to place a moving screen above the cluster.

If the move is to be made at some distance, the vibration of the motor of the truck or car may serve to quiet the bees, so it is possible to pick the colony up carefully and drive slowly without much flight or loss to the new place. I have often carried bees for miles on a brush, hanging on the side of a car. I have also found swarms clustered along the roadside, and secured them in a shirt, spread on the ground, and carried them home that way (not on my back!)

Once I had a swarm with a virgin light on my shirt and I actually walked the entire distance home wearing the shirt of bees and then hived the bees where I wanted them.

J. H. Sturdevant,
Nebraska.

— V —

I once had a small bee yard and had to have more room for increase in it and was compelled to turn the colonies already there in an opposite direction. They were facing south and I turned them east. They were sitting in pairs and I did not move them off their stands much. I did this late in the cool evening,

handling the hives rather roughly so the bees were disturbed. Some hives were moved as much as ten feet or more to make the rows facing east. I set limbs and boards of different sizes in front of the entrance for about a week and I was surprised that I couldn't see that the bees had drifted much. All the bees had the same strength as when I had changed them.

I once moved a yard a half mile using the same method of obstruction. Some returned to the old spot, but they seemed to leave and I think went back to their own colonies. The second day I did not see any more bees in the old location.

Lewis K. Laurence,
North Dakota.

— V —

THE bees leave their hives in quest for stores, but seldom go more than one or two miles. When a bee has once fixed its location, it starts on successive trips without spending any time to orientate itself unless something makes it suspicious, or after long confinement. Natural swarms seem to forget their previous location, so anything that reduces a colony to the status of a national swarm causes the bees to stay where they are placed.

Moving bees during the working season short distances may result in the loss of the working force and some honey. Also if the weather is cool, it may even reduce the population enough to result in chilled brood.

I use this method: I rotate the colony about 90 degrees. The next day I rotate it 180 degrees. On the third day, I move the hive to a new place. By this time, the field force has become suspicious about the antics of the entrance and are timid about going out. I like to make the last move late in the evening and throw some grass or weeds against the entrance as a further warning.

Probably the best way is to wait until winter when after weeks of confinement, the bees may be placed in any position, and mark their new location when they fly again.

After the main honeyflow I often move bees short distances and start a nucleus with the bees returning to the old spot.

Harry T. Starnes,
Indiana.

— V —

MOVING bees for distances of five to thirty-five miles is always done in the daytime. Smoke enough hives for a load, with cool heavy smoke; after about five minutes, load all the bees on a truck while the motor is still running, with the entrances open, the hives facing forward, preferably doing the work late in the afternoon. Very few bees are left behind and very few are lost.

This works with me at any time of the year in this southern part of Texas.

Clay C. Eppley,
Texas.

— V —

ACCORDING to the inspector who was with me in the beginning of my beekeeping experience, moving can be accomplished by waiting until after sunset, then with a smoker, give the bees a few puffs at the entrance and a few minutes later some more. According to him, the bees may then be moved "ten feet or ten miles." I have moved bees all over my yard and even several miles in a car and it seems to work for me.

Sim W. Hyde,
Arizona.

— V —

I go to the apiary in the evening to get ready to move the following morning. I make screens for the entrance, fastening them on the top temporarily with thumb tacks. I get up in the morning an hour before daylight, then put each screen across the entrance with the thumb tacks and the hives are then loaded, the hives facing the front for ventilation.

Arriving at the new location, three or more miles away and setting the bees off preferably in the reverse order to the way in which they were loaded so that the first ones on are the first ones off, placing them on their stands which may have been prepared for them the day before.

When all the screens are off, a small board or lath is leaned against the top of the hive sloping down to the ground on the front. I call these bump boards. The bees then contact something strange when they come out and so will locate their place. In about an hour's time, they have all found their way and will work like they never had been moved.

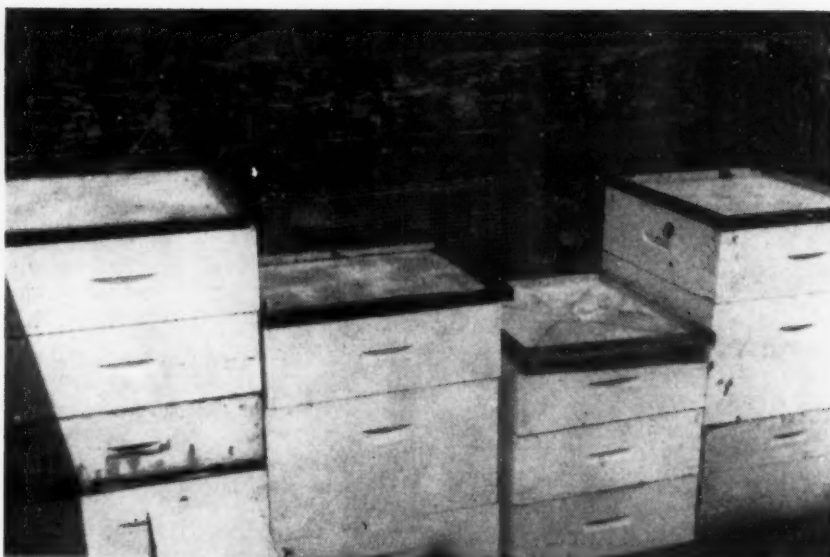
Joseph E. Wilson,
Kansas.

— V —

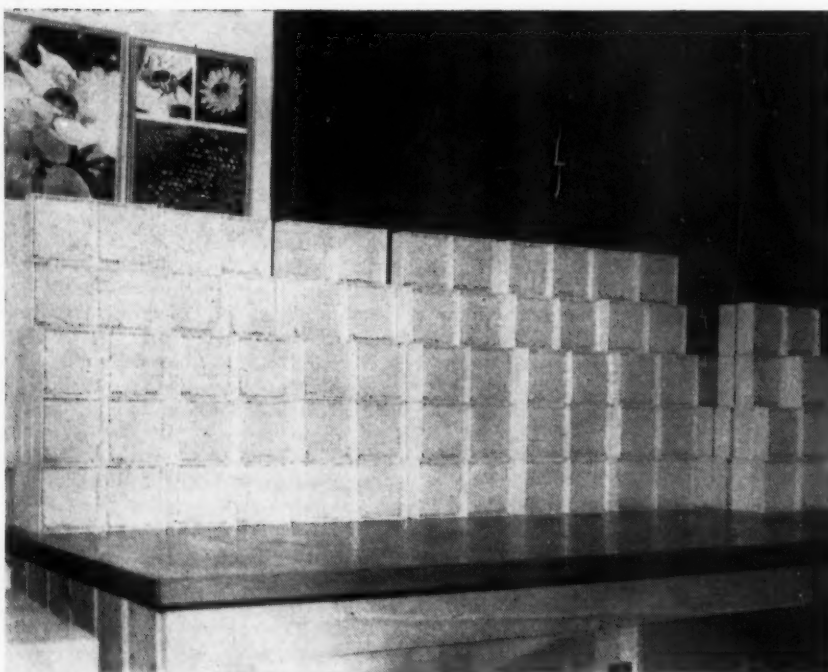
A STRAIGHT CASE OF THIEVERY

A beekeeper some distance from here lost bees from fourteen colonies when he was away for a few days. He intended to extract on returning, which he did, but no bees were there, only queens were said to remain. It is supposed a cage was put in front of each hive and some kind of scent placed there to attract the bees out. The bees were sent away to Alberta and were traced that far by police. This is a new one on me. I did not know of anything that would act that way.

R. E. Thomas,
British Columbia.



1



2

3 Below



4



5

1—Acid boards, turned upside down on supers as they are loaded. And how the robbers scatter!

2—Exhibit of fancy comb honey from the apiaries of Carl Killion and Son, Paris, Illinois. Carl is also our chief Apiary Inspector for Illinois.

3—William Meier, Mid-Sioux Apiaries, has this pleasant yard in part shade, what we think an ideal place to work and for the bees.

4—Ira O. Frye, Bussey, Iowa, had a swarm hived by his neighbor in a chicken coop, who made frames for the "super," with strips of galvanized screen wire for "foundation."

5—A. G. Pastian, Brandon, South Dakota, uses this root cave for his bees in winter. The ceiling and door are insulated with 8-14 inches of sawdust. Uniform temperature 44-50 degrees; loss less than 10%; little honey used.



1



2

1—James L. Barker uses the swarm catcher, on a pole. Sometimes the catcher is furnished with a comb to draw the bees; often the bees are just brushed off into the catcher. Swarms in high places, as our Question for May indicated, poses a problem in gymnastics.

2—Doctor Bodog F. Beck, before his death, furnished us with many pictures of the use of bees in coats of arms. Here is one, the ancient arms of the Bee family, with the bees in the upper left corner, and skeps in the upper right. Evidently beekeeping was part and parcel of the life of the bees.

• American Honey Institute •

Three new pieces of literature will soon be in the mail to members of the Institute. If you are not on the mailing list, send a request for complimentary copies.

— V —

A booklet of recipes for the baker is now ready. Help the industry by purchasing these books at 5 cents each to distribute to the bakers in your town. The following formulas are included:

BREADS—

Dutch Honey Bread.
Honey and Nut Bread.
Honeynut Butter Buns.
Honeynut Butter Kernel Kuchen.
Honeynut Cream Coffey Cake.
Honey Ring.
Honey Top Roll.
Milk and Honey Bread.
Raisin Honey Top Coffee Cake.
Whole Wheat Bread with Honey.

CAKES—

Chocolate Filled Honey Cakes.
Honey Harvest Cake.

COOKIES—

Lebkuchen.
Pecan Honey Wafers, No. 1.
Pecan Honey Wafers, No. 3.

FILLINGS AND TOPPINGS—

Butter Cream for Honey Nut Cream Coffee Cake.
Custard Cream for Honey Nut Cream Coffee Cake.
Honeynut Butter Topping, No. 1.
Honeynut Butter Topping, No. 2.

— V —

Honey Poppy Seed Filling.
Honey Topping.
Peanut-Honey Frosting.

MUFFINS—

Honey Fruit Muffins.
Honey Malt Bran Muffins.
Southern Honey Corn Muffins or Corn Bread.

TARTS—

Honey Macaroon Tart.
Paste for Bottoms.
Rhubarb-Strawberry Tarts.

— V —

The Department of Health of one of our states has asked for 200 copies of each of the Institute's books and leaflets.

— V —

The Director had a broadcast over WHA-WLBL on the first day of autumn. The subject was "Honey in the Fall Menu." On November 21, she will speak to the University of Wisconsin freshmen.

— V —

The American Honey Institute has added a number of supporting members to its list this year. The Institute appreciates the many and generous contributions that are being received from members throughout the nation. Those who desire to have their names appear in the Annual Directory must have their contributions in before December 31st.

TO GET GOOD WORKER COMBS

To get a set of good worker brood combs, let a colony from a good queen swarm. Hive the swarm on good substantial foundation. Place the swarm beside the parent colony but do not transfer the supers.

Forty-eight hours later, destroy the queen cells in the parent colony, remove the hived swarm from its bottom board and remove the supers from the parent colony. Set the swarm on top of the parent colony placing an excluder on top of the swarm, and the supers over this excluder. Five or six days later, destroy any cells which may have been built in the supers above the excluders, and also destroy

any additional cells which may have been started in the parent hive below.

The queen will usually lay in four or five of the center combs in the new hive, and then will return to the lower one. The swarming instinct has been satisfied and a good set of worker brood comb is drawn and filled with honey in the new hive body as fast as the brood emerges. The entire working force is together working with renewed energy, with plenty of room for expansion, and they will give the best possible results in either comb or extracted honey.

B. P. Sieber,
Alabama.

Meetings and Events

Bronx County (New York) Nov. 12

The Bronx County Beekeepers' Association will hold their regular monthly meeting at the home of Mr. Nathan Zwiebel 3326 Fenton Avenue, Bronx, on Sunday afternoon, November the 12th at 2:30.

This meeting will be for the discussion of things of interest to the beekeeper to be taken care of in the winter; repairing frames, and inserting wax foundation, and the repairing of broken combs by inlaying new pieces of foundation, removing drone cells and etc.

Bring your bee questions and problems. All interested in beekeeping are welcomed. Refreshments will be served.

Harry Newman,
Secretary.

— V —

Thirty-First Annual Meeting Iowa Beekeepers' Association Ames, Iowa

Memorial Union, Nov. 16-17, 1944

POST-WAR PROBLEMS

Thursday, November 16

9:45—Committee Reports.

10:00—Honey Plants — Discussion
Leaders: Frank C. Pellett, Atlantic;
Dr. J. N. Martin, Ames; Dr. Iver
Johnson, Ames.

Open Discussion.

12:00—Noon Luncheon.

1:30—Address, Harry D. Linn,
Secretary of Agriculture.

2:00—Colony and Apiary management—Discussion Leaders: John G.
Jessup, Perry; Newman I. Lyle,
Sheldon; Earl C. Robinson, Oelwein.
Open Discussion.

Friday, November 17

9:45—Committee Reports.

10:00—Supplies, Bees and Queens
—Discussion Leaders: F. L. Swanson,
Council Bluffs; Jere Fraser, Sioux
City; L. C. Dadant, Hamilton, Illinois;
E. C. Bessonet, Donaldsonville,
Louisiana.

Open Discussion.

12:00—Noon Luncheon.

1:30—President's Address, Glenn
O. Jones, Atlantic.

2:00—Marketing —Discussion
Leaders: L. D. Taylor, Harlan; R. F.
Remer, Sioux City; H. J. Heinz
Company, (R. E. Platt, Muscatine,
Representative).

— V —

Montana, Bozeman, Nov. 17-18

The Montana Association will hold its annual meeting in Bozeman, November 17 and 18. Officers will be

elected, and a round table discussion and an exhibition on time saving methods, state apiarist's report, discussion on disease control methods and the question "Does the Association wish to go on record as endorsing definitely prescribed control measures?" There will also be a discussion of legislative changes to be brought before the legislature and a discussion of territorial ethics. It is planned on the evening of the 17th to have the annual elk steak dinner.

Willard A. Bell,
President.

— V —

New Rochelle (New York) Nov. 19

The New Rochelle Beekeepers Association will hold their regular monthly meeting at the home of Mr. and Mrs. George Leys, 48 Drake Avenue, New Rochelle, N. Y., on Sunday, November 19th at 2:30 P. M.

A general discussion of the past summer's experiences will be brought up at this meeting. Also new and approved methods for winter packing will be featured. Don't forget the "Question Box." Refreshments will be served following the meeting.

S. Barnes,
Publicity.

— V —

Middlesex County (Mass.) Concord November 25

Beekeepers will break bread together on Saturday, November 25, at 7:00 P. M., 19 Everett Street, Concord, Massachusetts. The Ladies Auxiliary of the Middlesex Association is preparing a baked pork and bean supper, with brown bread, rolls, comb honey, coffee, cider, squash and apple pie. The club will present as a door prize a Christmas turkey, and moving pictures will be shown in the program.

A. M. Southwick,
President.

— V —

North Dakota, Fargo, December 6

The North Dakota Beekeepers Association will hold its annual meeting at the North Dakota Agricultural College, Fargo, on December 6. This will be followed by a one-day short-course in beekeeping. The whole program will center around a consideration of problems of importance to beekeeping. The program is now in course of preparation, and will probably include at least one out of state speaker.

J. A. Munro.

Arkansas, November 27

The first annual meeting of the Arkansas Beekeepers' Association will be held on November 27 in the Library of Pulaski County Court House in Little Rock, Arkansas.

We are a new and growing organization with already 82 members.

Irvin E. Nantze,
Secretary-Treasurer.

— V —

Oregon 25th Annual, Portland, Dec. 8

The 25th annual meeting of the Oregon State Beekeepers Association will be held in the Public Service Building, Portland, Oregon on Friday, December 8th.

H. J. Moulton,
President.

— V —

National Meetings January 14-16

According to present plans tentative dates for the annual convention of the National Federation of State Beekeepers Associations and allied industry organizations are Sunday, Monday, and Tuesday, January 14-16, 1945. These dates are dependent upon the securing of satisfactory hotel accommodations, the probable place of meeting being Chicago. Present plans call for separate meetings of various groups before the two days of a program of general interest.

Since many state associations will hold their annual meetings previous to the above dates, each should consider the matter of affiliation and the selection of delegates and alternates to the Board of Directors of the National Federation of State Beekeepers Associations. Each affiliated state association is entitled to one delegate on the Board of Directors, which determines the policies of the national organization. Since the Federation is in its infancy, important decisions will be on the agenda at the January meeting.

Further information concerning the Federation may be secured from the Secretary-Treasurer, V. G. Milum, 104 Vivarium Building, Champaign, Illinois.

— V —

Officers of National Auxiliary

The recently elected officers of the National Beekeepers' Auxiliary are Mrs. Reva Todd, State House, Des Moines, Iowa, president; Mrs. Irwin Powers, Parma, Idaho, vice-president; and Mrs. Howard Weaver, Box 14-L, Navasota, Texas, secretary-treasurer. News reporters from each state were appointed as follows: Arizona—Mrs. Raymond Benson, Box 62, Palo Verde; California—Mrs. Ethel Calvert, 17085 Sixth Str., Alhambra; Canada—Mrs. E. M. Poole, 641 15th Ave., New Westminster, British Columbia; Colorado—Mrs. John W.

Holzberlein, Grand Valley; Florida—Mrs. H. S. Foster, 905 E. Main No., Gainesville; Georgia—Mrs. C. H. Herndon, Du Pont; Idaho—Mrs. Irvin Powers, Box 72, Parma; Illinois—Mrs. Irene Duax, 3414 S. Western Ave., Chicago; Mrs. M. Guthrie, Route 1, Des Plaines; Mrs. Katherine Klebes, R. No. 1, Kirk Road, St. Charles; Mrs. Geo. Whytock, 3916 Fairview Ave., Downers Grove; Iowa—Mrs. Barbara Kirschbaum, McGregor; Kentucky—Mrs. Walter T. Kelley, Paducah; Louisiana—Mrs. M. Stevenson, Westwego; Massachusetts—Mrs. Walter H. Copeland, 30 Spring St., Lexington; Michigan—Mrs. Ida E. Becker, 10326 Wyoming Ave., Detroit; Minnesota—Mrs. Leonard Thrall, Worthington; Mississippi—Mrs. D. D. Stover, Stover Apiaries, Mayhew; Montana—Mrs. Chris. H. Buitenhoff, Manhattan; Mrs. O. R. Burdett, Laurel; Nebraska—Mrs. Johann Lauritsen, Kennard; New Hampshire—Mrs. P. N. Townsend, Honey Gardens, Lebanon, New York; New Mexico—Mrs. Leslie A. Shaw, Kirtland; New York—Mrs. Millard Coggs, 181 Cayuga St., Groton; North Carolina—Mrs. G. E. Curtis, Alamance Bee Company, Graham; North Dakota—Mrs. B. J. Knudson, Clifford; Ohio—Mrs. C. G. Renninger, Mohawk Road, Tiffin; Oklahoma—Mrs. Rose Cooper, 202 Stone Ave., Poteau; Rhode Island—Mrs. Abby Koplos, North Scituate; Texas—Mrs. E. H. Bremer, 811 Drexel, San Antonio; Mrs. T. W. Burleson, Waxahachie; Virginia—Ethel P. Mathew, R. No. 5, Richmond; Washington—Mrs. Earl G. Longanecker, Rt. No. 1, Tonasket; Washington, D. C.—Mrs. Harold J. Clay, 2603 Monroe St., N. E.; and Wisconsin—Mrs. S. F. Elliott, Menomonie.

— V —

Thomas V. Holton

One of Lee Stewart's bee club boys has paid the highest price for freedom on the battlefields of France, where he was killed in action July 31. He entered service from Dana, Indiana, September 15, 1943 and was sent overseas March 1, 1944. He entered France on Invasion Day. He was

trained in beekeeping at Newport, as a member of the well known Newport Bee Club.

— V —

Indiana, at Indianapolis, Nov. 15

According to present plans, the annual state convention in Indiana will be in Indianapolis, at the State House, November 15. Try to be present and bring as many beekeeping friends as you can.

James E. Starkey,
Secretary.

— V —

Report of Clemson College Short Course

On August 9th and 10th Clemson College enrolled fifty-four beekeepers in their fourth beekeeping short course. The Barracks were open to all without charge, giving all in attendance an in-expensive vacation on the College Campus.

Under the direction of Ned Prevost, Extension Bee Specialist, the work was carefully planned to present colorful information that everyone appreciated. Professor Dunavan and W. H. Purser assisted Ned in carrying through an active program.

Director D. W. Watkins complemented the work and spoke highly of the progress of beekeeping through extension efforts. Dr. Watkins called for united effort in building a honey show second to none for the State Fair in Columbia last of October.

Out of state visitors besides the writer were P. G. Craddock, North Carolina State Inspector and G. W. Vest, Lynchburg Branch Manager for G. B. Lewis Co.

W. W. Carter, President of the Palmetto State Beekeepers Association, did a beautiful job as chairman for the entire session. Ned called for definite representation at the Greensboro Convention of Southern States Beekeepers Federation on October 25-26. Chairman Carter engineered the motion carefully and had six delegates and six alternates elected to represent the state at the Greensboro Convention.

We have never seen greater interest in the Southern Conference before and Virginia too will be there in force.

A. D. Hiatt.

Italian Bees and Queens

WE ARE NOW BOOKING ORDERS
FOR 1945
PACKAGE BEES

Price will be Beekeepers Agreement
Price which will appear in December
issue.

Kermit Anderson

OPP, ALABAMA

Italian Packages and Queens

We are now booking orders for
the 1945 season. Place your
orders early for preferred ship-
ping dates.

F. E. Morrison

P. O. Box 320, Butte City, Calif.

We are now booking orders

for package bees for 1945. Each package
with young laying Italian Queen.

W. E. CLOUD

MUIR ROAD, ROUTE 1,
YUBA CITY, CALIFORNIA

ROOT QUALITY BEE SUPPLIES

GLASS AND TIN CONTAINERS
HONEY AND BEESWAX WANTED

M. J. BECK CO.

Successor to M. H. HUNT & SON
510 N. Cedar St., Lansing, Mich.

HONEY FOR SALE

We buy and sell all kinds, any
quantity.

H. & S. HONEY & WAX CO.

Inc.
265-267 Greenwich St., New York

"HONEY GIRL" ITALIAN

PACKAGE BEES AND QUEENS

ST. ROMAIN'S

"Honey Girl" Apiaries

MOREAUVILLE, LOUISIANA

FOR SALE

BRIGHT YELLOW AND THREE
BAND QUEENS

GRAYDON BROS.

RT. 2 GREENVILLE, ALA.

ITALIANS

QUEENS

CAUCASIANS

Daughters of Queens Bred
for Resistance

Bred to Italian
Drones

QUEENS balance of this year \$1.00 each. Send for Free Circular.

2-Lb. pkg. bees with queen \$4.00
3-Lb. pkg. bees with queen 5.00

Over 25 years a shipper in U. S. A.
and Canada

BLUE BONNET APIARIES

Route 1, Box 70, Mercedes, Texas

**Protect your future
by cooperating
with these reliable
HONEY PACKERS**



THE reliable Packers whose firm names appear on this page market a big share of America's finest branded honey.

Each of these Packers possesses . . . and continually promotes . . . a famous brand of honey that housewives know and prefer.

This is because year after year, in good seasons and bad, these Packers jealously guard the *uniform* excellence of their well-known brands.

It is due, also, to another reason. Year after year, these Packers invest thousands of dollars in advertising to widen the home use of good, flavor-perfect table honey.

The result has been what you would expect. Today, this branded honey market is the biggest

single outlet for the nation's quality honey crop.

It is a market vital to every Beekeeper in maintaining good future sales and prices and in assuring postwar prosperity to the entire honey industry.

What does all this mean to you, Mr. Beekeeper? Isn't the answer plain? Shouldn't you, in your own best interest, act wisely and act now? Shouldn't you sell all the honey you can . . . and sell it right away . . . to one of the Packers listed here and thus help support this big, important branded honey market that is so essential to you?

Of course, you'll get top OPA Ceiling prices. Why not send in samples with information about how much honey you can spare . . . without delay?

CROP AND MARKET REPORT

Compiled by M. G. DADANT

Bees are going into winter quarters in excellent condition thanks to late rains and a good fall flow of honey. There will be some feeding necessary in certain sections as reported from Connecticut, Maryland, Ohio, North Dakota, Kansas and Colorado. In addition some sections of Idaho and Utah have not made sufficient crops to warrant carrying the bees through and there are quite a number of colonies being killed to be replaced by packages next spring.

Condition of Plants

Here we see a most decided improvement over 1943 fall in that rains have not only built up the small white clover and other seeded fields of legumes but have also furnished a nice fall flow wherever fall plants were available. Even the aster yielded heavily and the comparatively warm fall has allowed it to be properly ripened so that it should show no deleterious effects in the hive. We believe that conditions are considerably above normal except that the southern sections of New England States show dry spots, as does Louisiana, some parts of Pennsylvania and eastern Ohio. Outside of irrigated districts some of the Inter-Mountain territory, particularly Colorado is quite dry also. Otherwise conditions are, we believe, quite a lot above normal.

Reduction in Honey Plant Acreage

Honey plant acreages do not change much over the Eastern States, the entire Southeast, and the South,

from one season to another, inasmuch as they do not enter into heavy crop rotation. Probably there is some reduction in alsike and buckwheat in New York and some reduction of honey plants in Texas owing to the plowing up of natural flora for transplanting into cultivated land. However there has been a gradual decrease in acreage of the legumes and other nectar yielding plants in the central west where corn and soybeans take their place.

We do see indications that sweet clover plantings are being resumed, as reported particularly in Iowa, North Dakota and Nebraska. California also shows increased plantings of alfalfa with a reduction in those sections which were burned over.

The recommendations of farm advisors is for resumption of clover seeding just as quickly as the danger of food shortage is over. It looks, therefore, like we might see an increase in clover acreage but whether it will be left for nectar or whether a great deal of it will be red clover remains to be seen.

How Is Honey Moving

We would surmise that honey is moving slowly compared to last year. Part of this is due to the slowness in taking off the crop and part to the fact that the furor of getting in winter supplies has somewhat

subsided. Also the fruit crop is better this year and other syrups are in greater abundance. However, we believe that honey is moving satisfactorily and that there will be no difficulty in disposing of the entire crop at ceiling prices before another crop is available. It is probably true that packers are not planning on heavy stocks of honey unless they can get the quality they want. Also there may be a "husbanding" of distribution to make available crops carry through without having to resort to the importation of honey which has proved entirely unsatisfactory.

Is Amber Honey Moving?

We have had reports of amber honey moving slowly. Such reports still exist, particularly in sections where the cheaper imported honey was distributed. It was off flavor and "killed the market" for some amber packs. This may also account for the slower demand on the part of packers for amber grades, as they try to move off this poorer honey through other channels. However in territories where amber is the quality honey of the section it is moving almost as readily as can be expected, although nothing like 1943 fall.

The Crop

Government reports show that the total crop this year is 177,000,000 pounds compared to 185,000,000 last year, which was also a short crop. This is only 5 per cent under last year but still far below the average, so there will be no necessity of selling honey this year below ceiling prices.

PIGEONS

If you are interested in Pigeons, you need the AMERICAN PIGEON JOURNAL, an informational instructive 52 page monthly magazine. Sample 15c; 12 months, \$1.50.

AMERICAN PIGEON JOURNAL
Dept. B Warrenton, Mo.

The GOAT WORLD

OFFICIAL ORGAN OF THE American Milk Goat Record Association
Oldest and largest Milk Goat magazine published. Broadcast circulation. Articles by best authorities. Subscription rate: one year \$2.00; three years \$4.00; five years \$6.00.

Sample copy 20 cents
Address:
The Goat World, Roanoke, Va.
1119 WILLIAMSON ROAD

One Can or a Carload—What have you? Mail your offerings to us.—Prompt action. Cash on delivery.

JEWETT & SHERMAN CO.
Lisbon Rd. & Ervins Ave. 1204 W. 12th St.
Cleveland, 4, Ohio Kansas City, Mo

OUR SITUATION

OUR SHIPPING SCHEDULE IS FULL TO THE SECOND WEEK IN MAY. If we can be of service to you after the above time, please write us. It is possible that more orders will be added during the early spring. Thanks for your patronage.

BESSONET BEE COMPANY, Donaldsonville, Louisiana

WANTED

First class QUEEN BREEDER, year round or seasonal work. Top salary for A-1 man. Must be capable to produce quality and quantity.

THE PUETT COMPANY

Hahira, Georgia

Gaspard's Quality Italian Package Bees & Queens

We are now booking orders for Spring 1945. Only 20% with order, balance at shipping time. 50c more per package after January 1st. Prices as follows:

2-Lb. package with queens \$3.50
3-Lb. package with queens 4.50
4-Lb. package with queens 5.50

J. L. GASPARD

Hessmer, Louisiana

HONEY WANTED Carloads or Less
HIGHEST PRICES PAID

LEWIS A. KONCES CO.
NORTH ABINGTON, MASS.

HONEY WANTED

Less and less than cars
Mail Samples
O. W. AEPPLER CO., Oconomowoc, Wisconsin

• THE MARKET PLACE •

BEES AND QUEENS

CAUCASIAN and CARNIOLAN package bees. Spring delivery. Write for price. Tillery Brothers, Greenville, Alabama.

ITALIAN QUEENS ninety cents each, \$10.00 per dozen, \$75.00 per hundred. Spring delivery. Walter D. Leverette Apiaries, P. O. Box 364, Fort Pierce, Florida.

We are completely sold out of our CAUCASIAN QUEENS and BEES for the balance of this season and until July first 1945. For their splendid patronage we wish to thank our many friends. REMEMBER... order early. T. L. Nicolaysen, Salida, California.

THREE BANDED Italian bees and queens. Fine honey gatherers and easy to work with. 2 lbs. and queen \$3.50; 3 lbs. and queen \$4.50. Select untested queens 1 to 25, \$1.10; 25 to 50, \$1.05; 50 up, \$1.00. Alamance Bee Co., Graham, N. C.

PACKAGE BEES for 1945. Information free. Crenshaw County Apiaries, Rutledge, Alabama.

HONEY AND BEESWAX WANTED

TOP CASH ceiling price paid for your extracted honey. Any amount. Honeymoon Products Co., 39 East Henry St., River Rouge 18, Michigan.

CLOVER HONEY WANTED—Top prices for extracted, section and shallow frame comb. Truckloads or carloads. Tell us if you can deliver. KEDASH BROTHERS, Chillicothe, Ohio.

HONEY AND BEESWAX. HIGHEST PRICES PAID. MAIL SAMPLES, ADVISE QUANTITY. BRYANT AND COOKINHAM, LOS ANGELES, CALIFORNIA.

WAX WANTED—We pay freight charges, and remit the day wax is received, or send C. O. D. Write us for quotations for making your wax into foundation; all work guaranteed. The Hawley Honey Company, Iola, Kansas.

HONEY WANTED—Small or large lots. Send sample and amount. Rocke Apiaries, Eureka, Illinois.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1260 Produce Street, Los Angeles, California.

CASH FOR YOUR WAX the day received. Write for quotations and shipping tags. Walter T. Kelley Co., Paducah, Kentucky.

ALL GRADES extracted honey wanted. Bee supplies and honey containers for sale. Prairie View Honey Co., 12243 12th Street, Detroit, Michigan.

HONEY FOR SALE

MICHIGAN'S FINEST WHITE CLOVER HONEY in glass. You will be pleased. Write for prices. John McColl, Tecumseh, Michigan.

WANTED TO BUY

1 to 1000 used 10-frame queen excluders, all metal. F. E. Morrison, Box 320, Butte City, California.

HONEY WANTED

WANTED—Aster honey. Send sample. Robt. W. Lane, Greeneville, Tennessee.

ASTER HONEY WANTED—Send sample, price and quantity you have. N. S. Gladish, 3315 Hobbs Rd., Nashville 5, Tennessee.

Copy for this department must reach us not later than the fifteenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rates of advertising in this classified department are eight cents per word, including name and address. Minimum ad, ten words.

As a measure of precaution to our readers we require reference of all new advertisers. To save time, please send the name of your bank and other reference with your copy.

Advertisers offering used equipment or bees on combs must guarantee them free from disease or state exact condition, or furnish certificate of inspection from authorized inspectors. Conditions should be stated to insure that buyer is fully informed.

WANTED—Extracted honey, white or light amber, in 60's. Ed. Heldt, 1004 W. Washington St., Bloomington, Illinois.

FOR SALE

150 acres land located in frost free area in Yuma County, Arizona, in Yuma Gila irrigation project. Water development expected to be ready one year after war. Will trade for bees and equipment located in California or Nevada. Box 160, care American Bee Journal.

FOR RENT—Bees on shares. Operating 5,000 colonies western Iowa. Will furnish size unit to suit. All good 10 frame equipment. Good locations. You must know the bee business. If not sufficiently experienced will employ on salary while learning. Need several experienced helpers. Old Taylor Honey Co., Harlan, Iowa.

FOR SALE—1, 2 and 3 frame nuclei with queens spring delivery. Also two and three pound packages. Untested queens January, February and March, \$1.50 each. Wm. Atchley, 132 Campus Ave., Upland, Calif.

WRITE FOR CATALOGUE. Quality bee supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Michigan.

SUPPLIES

"WHIRL DRY" CAPPINGS DRIER, is designed to dry the cappings as they fall from the knife. 50 inch size, one only, \$90.00. S. P. Hodgson & Sons, New Westminster, B. C., Canada.

YOUR WAX WORKED into high quality medium brood foundation for 16 cents lb., 100 lbs. \$12.00. Fred Peterson, Alden, Iowa.

COMB FOUNDATION at money-saving prices. Wax worked at lowest rates. Comb and cappings rendered. Robinson's Wax Works, Mayville, N. Y.

LARGE CASH SAVINGS can be made by letting us work your wax into either wired or plain foundation. Large independent factory manufacturing a complete line of bee supplies including extractors, etc. Selling direct saves you the agent's profit. Quick shipment from large stock. Large free catalogue explains everything. Walter T. Kelley Co., Paducah, Kentucky.

PORTER BEE ESCAPES are fast, reliable, labor savers. R & E. C. Porter, Lewis town, Illinois.

WANTED

WANTED FOR CASH, located in eastern North Dakota or Western Minnesota—100

good used 10 frame metal tops, 200 good used 10 frame bodies. Write net price in first letter. H. A. Schmitt, Box 449, Mandan, North Dakota.

FOR SALE—Sainfoin seed 1944 crop grown without irrigation. 75c per pound up to 10 lbs. 55c per pound in lots over 10 pounds. R. W. Brimhall, Pleasant Grove, Utah.

10 frame supers with drawn frames. Prefer some with honey, if possible. H. Franz, 1726 N. First Street, Milwaukee 12, Wis.

SEEDS

SEEDS of honey plants. Twenty desirable varieties for bee gardens and waste land. Six packet collection \$1.00, fifteen packets \$2.00, postpaid. Interesting circular for the asking. Melvin Pellet, Atlantic, Iowa.

POSITIONS AND HELP WANTED

WANTED—Beeman experienced in honey production. Steady employment. Salary or share basis.

The Hallman Farms, Blackshear, Ga.

WANTED—Steady reliable beeman. Interested in several years steady work. Give description, age and wages expected. Al Winn, Butte City, California.

TRAPPERS

TRAP FOX AND COYOTE, on bare ground or deep snow. Learn modern tricks to outwit the sly furbearers. Free illustrated circular. Q. Bunch, Welch, Minnesota.

COLONIES FOR SALE

500 to 700 eight frame colonies of bees. Factory made equipment includes 4 shallow extracting supers, combs all wired and as nearly perfect as can be. Plenty of winter stores. All headed by our famous Polhemus queens. Present locations can be had. These bees average \$15.00 per colony income for the season. If interested in a good package bee and honey business write T. W. Burleson, Waxahachie, Texas.

2,000 single story colonies with young queens, ready for flow in Midwest, to be shipped May first, \$10.00 each. Reasonable discount in large lots. Will take honey or wax in exchange. Wm. Atchley, 132 Campus Ave., Upland, California.

MISCELLANEOUS

SUBSCRIBE for Honey Cookery News—bi-monthly 35 cents. 3414 S. Western Ave., Chicago, Illinois.

GET your drawings and construction detail NOW for proven tried BRADSHAW DEMOUNTABLE UNCAPPING PRESS. No more headaches, simple to build your self. Won't rust out, last lifetime. Producers report it greatest improvement in fifty years. No heat required, will not darken honey. Adaptable any size outfit. Send \$2.00 today for PLANS to Bradshaw & Sons, Wendell, Idaho.

RANCH MAGAZINE—Do you find it difficult to secure information about sheep and sheep ranching methods? The SHEEP AND GOAT RAISER reaches more sheepmen with more information on range sheep than any magazine published. Subscription \$1.50. Hotel Cactus, San Angelo, Texas.

DIFFERENT, that's all. Written and published for the instruction of beekeepers. Contains breezy entertaining beekeeping comment each month. One year, \$1.00; two years, \$1.50. Sample, 3c stamp. Beekeepers Item, San Antonio, Texas.

BLUE RIBBON PACKAGE BEES

"BEST IN THE WEST"

We are sold out for 1944 season

THOS. C. BURLESON COLUSA, CALIF.

The BEEKEEPERS ITEM

The Southern beekeepers' own magazine, but read by studious honey producers everywhere.



With the American Bee Journal makes a combination that covers the beekeeping field.

Send \$1.75 and get Both Magazines for a year BEEKEEPERS ITEM, San Antonio, Texas

HONEY WANTED

CARLOADS OR TRUCK LOADS

Ellsworth A. Meineke
ARLINGTON HEIGHTS, ILLINOIS

BEEKEEPERS MAGAZINE

Serving the Honey Producers of America
Mail a postal card today for special introductory offer.

Or send for this combination special—American Bee Journal and Beekeepers Magazine, both for one year \$1.75.

BEEKEEPERS MAGAZINE
RT. 5, LANSING, MICHIGAN

CANADIAN BEE JOURNAL

Canadian beekeepers too have wartime problems. If you are interested in bee activities "North of the Border," send us your subscription NOW. We will see that you receive each monthly copy regularly.

Each issue contains timely articles of value to beekeepers everywhere, and News and Views from Coast to Coast.

Subscription price, \$1.25 per year in U. S. A.

CANADIAN BEE JOURNAL
OSHAWA, ONTARIO

WESTERN CANADA BEEKEEPER
Subscription \$1.00 per year, \$1.50 two years, \$2.00 three years. In combination with American Bee Journal \$1.75 per year.

Timely topics on western Canadian beekeeping and all the news about Canada and Canadian markets. You cannot afford to be without the most up-to-date information in these days of great changes. Sample copy free. Address WESTERN CANADA BEEKEEPER, Wallingford Building, Winnipeg, Manitoba, Canada.

Thanks Ten Millions

We are booked to the limit for 1944—Please try us earlier in 1945. Thanks.

The Victor Apiaries
WEST COLUMBIA, TEXAS

Australian Beekeeping News

The Leading Bee Journal of the Southern Hemisphere is the

"Australasian Beekeeper"

Subscription 5 shillings per year, start any time. Enquire for International money order for 5 shillings (Australian) at your Post Office. Write now to The Editor, P. O. Box 20, West Maitland, New South Wales, Australia.

Pettits Package Bees for 1945

WITH QUEENS

Sold out to May tenth, can accept more orders for shipment later.

WITHOUT QUEENS

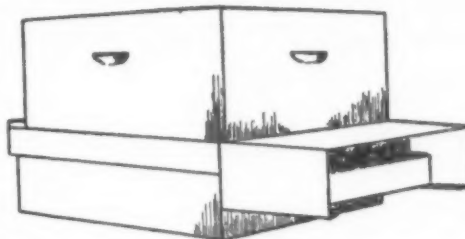
Can accept orders for shipment from April first on through May.

Prices will be released soon.

MORLEY PETTIT

Tifton, Georgia

SOY BEAN FLOUR (Pollen Supplement) & POLLEN TRAPS



OUR SOY FLOUR WILL COST US MORE AFTER OCTOBER 11 DUE TO HIGHER PRICES FOR THE NEW CROP OF BEANS. WE ARE EQUIPPED TO HANDLE ALL FLOUR AND POLLEN TRAP ORDERS PROMPTLY.

KILLION & SONS
APIARIES PARIS, ILLINOIS

We take this means to thank our customers for their fine patronage during the past season. We are fast filling our schedule for 1945. Early bookings advised.

2 STRAINS—
PROGENY-TEST 3-BANDED ITALIANS
VARIOUS HIGH QUALITY RESISTANT STOCK

GARON BEE COMPANY, Donaldsonville, Louisiana
Telephone 8614
Telegrams—Western Union

Read What Others Are Doing

2 Yrs. \$1.50

1 YEAR, \$1.00; 3 YEARS \$2.00
(U. S. A. and Canada)
FOREIGN 25c EXTRA FOR
POSTAGE PER YEAR

SPECIAL

GLEANINGS IN BEE CULTURE
For 6 Months
STARTING RIGHT WITH BEES
96 Page Book, Illustrated
BOTH FOR 75 CENTS

The A. I. ROOT CO., Medina, O.

Gleanings in Bee Culture—1 Yr. \$1.75
American Bee Journal—1 Year In U. S. A.



American Bee Journal Classified Ads Bring Satisfactory Results

Announcement

I have just purchased from Albert Koehnen, his Live Oak plant and 5,000 colonies of bees, with other equipment necessary for handling package bees.

This does not mean there will be a change in management, as I have been operating these bees for Mr. Koehnen, for the past six years. This assures our customers of the same high quality of bees and queens, and dependable service they have been enjoying in years past.

We are now booking orders for Package Bees and Queens for 1945. Write for prices, stating quantity wanted.

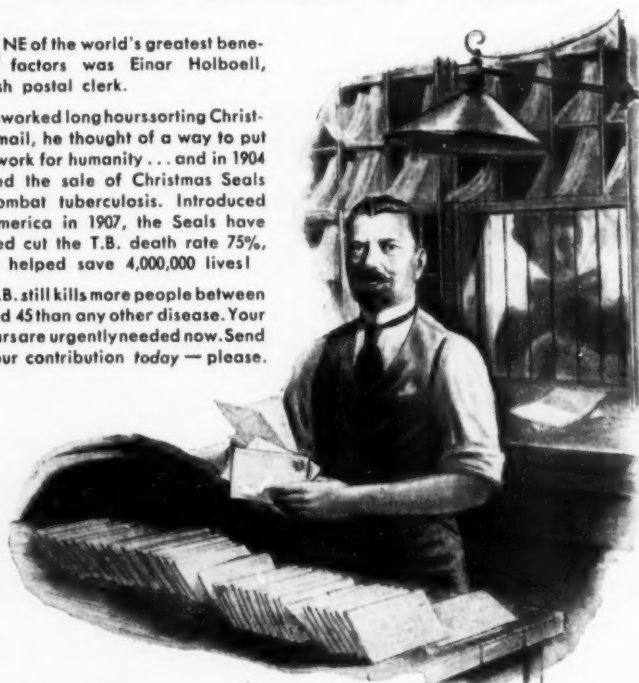
JOHN S. SHACKELFORD
LIVE OAK, CALIFORNIA

How a Dane Saved 4 Million Americans!

ONE of the world's greatest benefactors was Einar Holboell, Danish postal clerk.

Asheworked long hours sorting Christmas mail, he thought of a way to put it to work for humanity... and in 1904 started the sale of Christmas Seals to combat tuberculosis. Introduced in America in 1907, the Seals have helped cut the T.B. death rate 75%, have helped save 4,000,000 lives!

But T.B. still kills more people between 15 and 45 than any other disease. Your dollars are urgently needed now. Send in your contribution today—please.



**BUY CHRISTMAS
SEALS!**

The National, State and Local
Tuberculosis Associations in
the United States

Thanks- For your orders

We are now booked with all orders we can fill until June 1945.

Weavers Apiaries
NAVASOTA, TEXAS

Italian Package Bees and Queens

Next year is just around the corner. Remember the delays and rejected orders of the past spring, and order your package bees early.

B. J. Bordelon Apiaries
MOREAUVILLE, LOUISIANA

NOTICE!

My Address Has Changed From Opp, to Gordon, Ala. Rt. 1 1945 prices on bees and queens will appear in a later issue. Thanks.

B. A. Anderson & Co.
GORDON, ALA.
B. A. Anderson, Owner

Three-Banded Italian Queens

Prices	
1 to 24	\$.75
25 to 99	.70
100 and over	.65

Postpaid
HOMAN BROS.
SHANNON, MISSISSIPPI

Root Quality Bee Supplies

Containers—Glass Jars—60 Lb. Cans.
We want honey and beeswax.

A. I. ROOT CO.
224 West Huron St., Chicago, Illinois

1945 PRICES ITALIAN BEES AND QUEENS

2-lb. pkg. with queen \$3.75; 3-lb. pkg. with queen \$4.75; 4-lb. pkg. with queen \$5.75. Prompt shipment and safe delivery guaranteed, 20% deposit on booking orders.

Order early and play safe.
CLOVER BEE FARM
Address, HESSMER, LA.

Got a Hobby?

Keep up with the latest developments in your field. Here's a group of magazines that specialize in a particular subject! You'll be interested in at least one of these magazines . . . and you have the assurance that the articles are written by people who know. Send in your subscriptions today!

Bee Magazines	Per Year
American Bee Journal	\$1.00
Gleanings in Bee Culture	1.00
Beekeepers Item	1.00
Horses	
National (Saddle) Horseman	5.00
The Horse, bi-monthly, breeding, schooling, training, sports	5.00
The Chronicle, weekly, breeding, fox hunting, racing, shows	5.00
Thoroughbred (Horse) Record, w. Rider & Driver, m., horse-sport-pleasure	4.00
NRA Round-Up, (Rodeo)	3.50
Spokesman & Harness World, m.	.50
Farming	
The Country Book, quarterly	1.00
Farmer's Digest, m.	2.00
Co-Operative (Farmers) Digest	2.00
Livestock	
Berkshire (Hog) News, m.	1.00
Pacific Stockman	1.00
American Cattle Producers	1.00
Southeastern Cattleman	1.00
The Sheepman	1.00
Plantation Stockman, m.	2.00
Arizona Stockman, m.	1.50
Coastal Cattleman	1.00
Pigeons	
American Pigeon Journal, utility, fancy, racing	1.50
Pigeon News, fancy only	1.50
Poultry	
Northeastern Poultryman, 24 issues, 2 yrs.	1.00
Cackle & Crow, the Poultry Paper	1.00
Pacific Poultryman	.50
Rabbits	
Small Stock (rabbits, cavies exclusively)	1.00
American Rabbit Journal	1.00
Am. Sm. Stock Farmer, (Rabbits only)	.50
Fruit	
Better Fruit, monthly	1.00
Eastern Fruit Grower	1.00
Dairying	
Dairy Farmers Digest	1.00
Dairyland News, semi-monthly	.50
Other Specialties	
Small Commercial Animals & Fowls	.50
The Soybean Digest	1.50
New Agriculture (sugar beets only)	2.00
Tailwagger, m., (Dogs)	2.50
Eagle Mail Order News, m.	1.00
Modern Game Breeding, m., pheasants	3.00
The Home Worker, bi-monthly	1.00
Black Fox Magazine, m., fox, mink	2.00
Southern Literary Messenger, bi-monthly	1.00
Canary Journal, m.	2.00
Canary World, m.	1.25
Ozark Guide, Rayburn's, bi-m.	1.00
Homeworker's Friend, m.	1.00
Mail Sale Advertiser, m.	.25
Natl. Amat. Minerologist, m.	2.00
Ozark Mountains Republican, w.	1.50

Send for Free Catalog—Hundreds More!

All magazines are monthly unless otherwise noted; prices are for one full year. Satisfaction guaranteed. All orders are handled promptly and acknowledged. Rush your subscription today. Remit in any way convenient to you.

Sample copies at single copy prices

MAGAZINE MART
DEPT. B. J.
PLANT CITY, FLORIDA

JENSEN'S "MAGNOLIA STATE" Strain 3-Banded Italians

More of those good package bees and queens for 1945. Large increase in package colonies, and planned expansion of queen-rearing facilities will enable us to supply many of you whom we have had to turn away in the past.

Due to higher costs there will likely be some advance in prices, but until further notice we are booking orders at 1944 prices, with assurance you will get your packages or queens on time.

JENSEN'S APIARIES
MACON, MISS.

DON'T WAIT . . ORDER NOW!

10 frame Wood Bound Wire Queen Excluders, 5 or more, ea.	\$.80
10 frame Bodies with Frames, per 5	6.65
Hoffman Frames, per 100	5.05
25-Lb. Plain Brood Foundation, 8x16 1/4 or 8 1/2 x 16 1/4	17.50
25-Lb. Thin Surplus Foundation	19.75
Wire Face Veils, each	.80
Bee Escapes, each	.12
Smokers, 4x7, each	1.00
2 Inch Hive Staples, per lb.	.30
60-Lb. Cans (net) each	.38
60-Lb. Cans (used-subject to being on hand) each	.25
1-Lb. Glass Jars (packed 2 doz.) per case	1.00
2-Lb. Glass Jars (packed 1 doz.) per case	.90
5-Lb. Glass Jars (packed 1/2 doz.) per case	.55
Ultra Violet Ray Treated Queens, each	1.25
No. 14 Four-Frame Honey Extractor, non-reversible, hand power	14.75

WANTED—SHIPMENTS OF HONEY OR BEESWAX. WE ALSO

RENDER WAX FROM OLD COMB OR CAPPINGS

SEND FOR COMPLETE PRICE LIST

WE PAY HIGHEST CEILING PRICES ON HONEY OR WAX

Terms: Cash with order, f. o. b. Cincinnati

THE FRED W. MUTH COMPANY
229 WALNUT ST. : CINCINNATI (2) OHIO

Are you planning for . . . 1945?

Many PACKAGE buyers are placing their orders now for spring delivery, we believe it advisable that you do likewise as there seems to be an inclination to have shipments made earlier than in the past.

For your protection we offer to accept your order subject to your approval of prices when released.

We start shipping March 20 and prefer to close the season May 31. Summer and Fall queens available.

PACKAGE BEES AND QUEENS that prove this motto
"THEY PRODUCE"

ROSSMAN & LONG
BOX 133 : MOULTRIE, GA.

Caucasian Queens

No more orders accepted for queens as we are sold out for 1944. Thanks for your patronage.

BOLLING BEE CO., Bolling, Alabama

Leather Colored Italians

1945 Queens and Packages. Order now for preferred shipping dates at prices prevailing next spring. 25% deposit on all orders, payable after January 1. Avoid the rush and disappointment. Queens for October '44 limited. Remember, it pays to buy the best.

Gold Flat Apiaries
NEVADA CITY, CALIFORNIA



THE NEW NEISES HONEY FILTER

Pat. No. 2359238

Makes easy work of straining honey. For more information send for circular.

Reuben Neises
908 S. Cherry St.
Marshfield, Wisconsin

PRE-WAR SERVICE & QUALITY 3-Banded Italian Bees

Now available to the public. May we have the privilege of adding your name ANOTHER SATISFIED CUSTOMER

Queens	2-Lb. Bees	3-Lb. Bees
1 to 24		
\$1.10	\$3.50	\$4.50
25 to 100		
\$1.05	\$3.35	\$4.35

Apiaries accredited and certified by the Alabama Dept. of Agriculture.

O. K. ANDERSON & SON
COFFEE SPRINGS, ALABAMA

KOEHNEN'S Package Bees and Queens For Quality and Service KOEHNEN'S APIARIES GLENN, CALIFORNIA

Italian Bees and Queens

Each order we fill with care and then we say with pride "We have made new friends today, for we know they are satisfied."

LOUIS L. COUCH
"The Village Beekeeper"
PINEVILLE, LOUISIANA

THE POSTSCRIPT

Samples of nectar from anise-hyssop tested by Dr. O. W. Park for sugar concentration revealed the reason why the bees are so eager to visit the blossoms. Samples taken at different times and under varying weather conditions contained from forty per cent to 58 per cent of sugar. With an abundance of flowers which yield a nectar so rich in sugar the evaporation process requires less bee energy and surplus accumulates rapidly. Not only does anise-hyssop yield nectar with high sugar concentration but it blooms over a longer period of time than any other plant among the hundreds tried in our test gardens.

There is a great difference in the reports from eastern and western localities as to the attraction of the anise-hyssop for bees. From R. D. Richey, of Temple City, California, comes a discouraging report that the plants have done poorly with him and failed to bloom. In contrast Frederick Hahman, of Altoona, Pennsylvania writes that bees visit his plants from dawn to dark. Many such favorable reports have come from widely separated locations but a few indicate that the bees do not visit the flowers as freely as they do with us. Dr. E. P. Hummel, of Sterling, Colorado, reports that the plants made a vigorous growth with plenty of bloom but that few bees are to be seen on the flowers.

Several letters have come in response to the note in the September Postscript about weak stems of anise-hyssop. These reports indicate that while the young plants of the first season often act in the manner described by Mr. Franz, they act differently in later years. There is usually only one or two stems from each root in the first season and they lack the support that they find with many stems in a clump after the plant is well established. After that note was written we had a storm that blew down many of the first year plants in our test gardens while older plants showed no such tendency.

From Col. J. A. Tyrrell, of Farnam, Surrey, England, comes a report of a very poor season for bees. Instead of the usual wet weather in February it was bone dry. April, May and June were dry, with a hard frost on May 6. There were northerly and easterly winds with no nectar in the flowers and no honeyflow. July was wet and cold with no nectar. At time letter was written in August it was blazing hot and dry, "a terribly poor honey

year." Not even the lime trees yielded any nectar. — V —

Frank Hildebrand, of Laverne, Oklahoma, lives on the dry plains of the Oklahoma panhandle where the weather is generally dry. Sweet clover is the main dependence for honey but this year he moved his bees to an area where there is much Rocky Mountain bee plant. He reports a harvest of two to three supers per colony in three weeks. Rocky Mountain bee plant starts blooming at about the time sweet clover stops yielding so makes an ideal supplement for that crop.

Habit is apparently as strong with bees as with higher animals. During a period of three days of rain with water dripping from every leaf, the bees returned in large numbers to the lily pool for water. It reminded me of a flood when the cows swam through a swift current to reach the water trough where they were accustomed to drink.

The plants of greatest interest in the test garden this year are the new creeping legumes. We have a clover, an alfalfa and a trefoil that spread from underground rootstocks. The clover has come through three winters but we do not know, as yet, whether the alfalfa and the trefoil are winter hardy. If they prove to be so, the beekeeper can use them to provide bee pasture along the roadside with the expectation that they will be reasonably permanent.

If properly planted with the right sources of nectar the roadsides within reach of the average apiary can provide enough bee pasture to stabilize the honeyflow. We are searching for a variety of plants covering a long blooming season which will maintain themselves when once established. The energetic beekeeper can do far more to insure his pasture than has generally been thought possible.

Mountain mint is a profuse display of flowers in August and September. I counted 211 small flowers crowded in one head. There were 81 heads on one stem and eleven stems in the one clump. If you are good in mathematics try to estimate how many flowers there would be in an acre of mountain mint at the height of bloom. The bees swarm over the flowers for several weeks in late summer. In some localities beekeepers report good crops of honey from this source.

FRANK C. PELLETT.

1896—49—1944

Years' Experience

Although one year ahead of our Golden Anniversary, we are offering A Golden Opportunity to beekeepers to obtain all the COMB HONEY SECTIONS, HIVES, FRAMES AND SUPERS needed to handle the record honey crop anticipated this season. We have on hand and ready for shipment the restricted items listed above.

Our one piece honey sections are all made from this year's stock of choice WISCONSIN SECOND GROWTH BASSWOOD and selling at pre-war prices. Quantity discounts available.

In view of the continued shortage of paper so essential to the War effort, we did not print a catalogue in 1944, but as in the past our 1942 prices still prevail, in most cases. Or if you will send us a list of the items needed we will gladly quote prices. Remember our quantity discounts when ordering.

MARSHFIELD MFG. CO.
MARSHFIELD, WISCONSIN

True Label Characters



- *Designs that Compel Attention*
- *Colors that Blend and Please*
- *Wording that Makes a Sale*

Our Labels meet these requirements at very reasonable prices

Send for samples.

American Bee Journal
Hamilton, Illinois



Write for 1944 price list. We now have many items that have been short for some time. Prices remain steady except on bees. All stocks are low, so order early.

GLASS We again have a large stock of ECONOMY style glass jars ready for quick shipment

Carton of 24	1 Lb.	12 Lbs.	70c per case
Carton of 12	2 Lb.	9 Lbs.	42c per case
Carton of 6	5 Lb.	10 Lbs.	50c per case
Twelve cartons of 5 Lb.			\$5.00 per lot
Twenty-four cartons of 5 Lb.			\$9.95 per lot
Carton of 16 5-gal Cans			\$5.40

WALTER T. KELLEY CO. : Paducah, Kentucky

HONEY GETTING : *The Blue Book of Beekeeping*

Something brand new in bee books, entirely devoted to elaborating the principles behind getting a maximum crop at a minimum of expense. It will save you time and equipment and reduce your costs materially. We recommend it to you, whether you are a beginner, or a highly experienced beekeeper.

By E. L. Sechrist, formerly of the U. S. D. A., as beekeeping specialist; also a commercial beekeeper operating in the United States, and in the tropics; analyst on beekeeping costs for the United States Government.

Limited edition at a low price—\$1.50 postpaid. With a two year subscription to American Bee Journal \$3.00.

American Bee Journal : Hamilton, Illinois

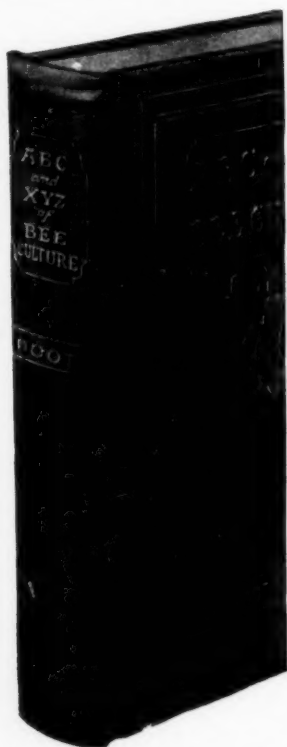
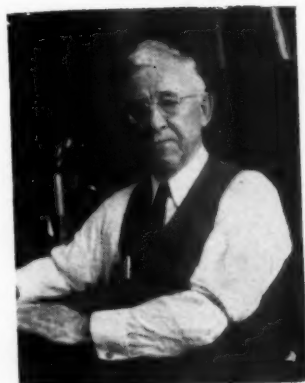
1945

EDITION

A Literary Triumph *in* *Beekeeping Editing*

E. R. Root, noted international authority on bees, was honored by the Ohio State University bestowing upon him the Degree of Doctor of Law for his great contributions on the value of the bee in the production of food. This singular recognition came just as he was finishing the gigantic task of revising this book which is indeed a masterpiece. It has taken Mr. Root nearly three years filled with days of long hours of reading, condensing and revising to complete this new edition.

Many new scientific articles that have come from research laboratories are included in a condensed form.



All subject matter alphabetically arranged.

Bound in beautiful fabrikoid
720 pages—700 illustrations

\$2.75

Postpaid

Outstanding Authorities

Have been consulted and quoted in order that this new edition can be the most complete book on bees ever published.

Dr. E. F. Phillips, Professor of Apiculture, Cornell University, Ithaca, New York.
James I. Hambleton, in charge of Bee Culture Laboratory for U. S. Department of Agriculture.
H. J. Clay, Food Distribution Adm., Washington, D. C.
Dr. Warren Whitcomb, Bee Culture Laboratory, Baton Rouge, La.
Dr. E. Oertel, Bee Culture Laboratory, Baton Rouge, La.
Dr. C. L. Farrar, Madison, Wisconsin.
Dr. H. F. Wilson, Wisconsin University, Madison.
Dr. Mykola H. Haydak, Minnesota Experiment Station.
Dr. M. C. Tanquary, Minnesota University, St. Paul.
Prof. F. B. Paddock, Iowa State College, Ames.
Dr. W. E. Dunham, Ohio State University, Columbus.
Dr. O. W. Park, Iowa Agricultural Experiment Station.
Dr. A. G. Lockhead, Ottawa, Canada.
Dr. J. E. Eckert, Davis California.

—And many other authorities have been called upon for information.

ABC & XYZ OF BEE CULTURE—Postpaid (Size 6x9 Inches). **\$2.75**

ABC & XYZ OF BEE CULTURE—And 2 Year subscription to GLEANINGS IN BEE CULTURE (Including Canada) (Foreign \$4.25). **\$3.75**

AVAILABLE NOVEMBER 1, 1944

THE A. I. ROOT CO.
MEDINA, OHIO